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Seq ID NO: 374 Protein sequence:
 Protein Accession #: built from XP_031379

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 Protein Accession #: NP_002842.1

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Nucleic Acid Accession #: NM_005688.1

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      GGCTCAGGCT CAGTACGGGC AGAGGCGCTA AGCCCGAGCT GCGCCCTCTT CCTAGGTCTA 660
      GCCTCTCTCC CTAGGGAATG GTCCAGCAC GAGTGGCCAG TTCATTGTGG GGGCCTGATT 720
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Seq ID NO: 386 Protein sequence
Protein Accession #: NP_001318.1

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      PRGPHGGAAS GLNGCCRCGA RGPESRLLEF YLAMPFATPM EAEIARRSLA QDAEPFLVPG 120
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Seq ID NO: 387 DNA sequence
Nucleic Acid Accession #: Bos sequence
Coding sequence: 52..459

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      CTTGATGGCC CAGGGGGCAA TGCTGGCGGC CCAGGAGAGG CCGGTGCCAC GGGCGGCAGA 180
      GGTCCCGGGG GCGCAGGGGC AGCAAGGGCC TCGGGCCGA GAGGAGGCGC CCGCGGGGT 240
40     CCGCATGGCG GTGCCGCTTC TGCGCAGGAT GGAAGGTGCC CTTGCGGGGC CAGGAGGCCG 300
      GACAGCCGCC TGCTTCAGAT CCGACTGACT GCTGCAGACC ACCGCCAAT CTGAGCTCTCC 360
      ATCAGTCTCT GTCTCCAGCA GCTTCCCTCG TTGATGTGGA TCACGCACTG CTTTCTGCC 420
      GTGTTTTTGG CTGAGGCTCC CTCAGGCGAG AGGCGCTAAG CCGAGCCTGG CGCCCTCTCC 480
45     TAGGTCTATC CTCCTCCCTT AGGGAATGGT CCCAGCACGA GTGGCCAGTT CATTTGTGGG 540
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Seq ID NO: 388 Protein sequence
Protein Accession #: Bos sequence

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Seq ID NO: 389 DNA sequence
Nucleic Acid Accession #: NM_005562.1
Coding sequence: 90..3671

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65     GCTTCTGCTT CCTCTAGCCC GCAGCCCGGG CCACCTCCAG GAGGGAAGTC TGTGATTGCA 180
      ATGGGAAGTC CAGGCAGTGT ATCTTTGATC GGGAACTTCA CAGACAAACT GGTAAATGGAT 240
      TCCGCTGCTT CAACTGCAAT GACAACACTG ATGGCATTCA CTGCGAGAAG TGCAAGAATG 300
      GCTTTTACCG GCACAGAGAA AGGGACCGCT GTTTGCCCTG CAATTGTAAAC TCCAAAGGTT 360
      CTCTTAGTGC TCGATGTGAC AACTCTGGAC GGTGCAGCTG TAAACCAAGT GTGACAGGAG 420
70     CCAGATGCGA CGATGTCTG CCAGGCTTCC ACATGCTCAC GGATGCGGGG TGCACCCAG 480
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      AAGCGGGCGG CTGCTCTGTC AAGCCAGCTG TTACTGGAGA ACCTGTGAT AGGTGTGAT 600
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      GGCATTGAGC CAGCTGCCGC AGCTCTGCAG AATACASTGT CCATAAGATC ACCTCTACT 720
75     TTATCAAGA TGTGATGGC TGGAAAGGCTG TCCAAAGAAA TGGGTCTCCT GCAAAGCTCC 780
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      TTGACTACCG TGTGACAGA GAGGGCAGAC ACCCATCTGC CCATGATGTG ATTCTGGAAG 960
80     GTGCTGCTCT ACGGATCACA GCTCCCTTGA TGCCACTTGG CAAGACACTG CTTGTGGGGC 1020
      TCACCAAGAC TTACACATTG AGCTTAAATG AGCTTCCAAG CAATAATTGG AGCCCCAGC 1080
      TGAGTTACTT TGAGTATCGA AGGTTACTGC GGAATCTCAC AGCCCTCCGC ATCCGAGCTA 1140
      CATATGAGA ATACATGACT GGGTACATG ACAATGTGAC CCTGATTTCA GCGCGCCTG 1200
      TCTCTGAGC CCAGCACCC TGGGTGAAC AGTGTATATG TCCTGTGTGG TACAGGGGCG 1260
      AATTCTGCCA GGATTGTGCT TCTGCTACA AGAGAGATTG AGCAGACTG GGGCCTTTTG 1320

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	GCACCTGTAT	TCCTTGTAA	TGTCAAGGGG	GAGGGGCTG	TGATCCAGAC	ACAGGAGATT	1380
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	ACGATTCGCA	CGACCCCGC	AGCTGCAAGC	CATGTCCCTG	TCATAACGGG	TTGAGCTGCT	1500
5	CAGTGATGCC	GGAGACGGAG	GAGGTGGTGT	GCAATAACTG	CCCTCCCGGG	GTCCCGGTG	1560
	CCCGCTGTGA	GCTCTGTGCT	GATGGCTACT	TTGGGGACCC	CTTTGGTGAA	CATGGCCGAG	1620
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15	AAGGTGCTAG	CAGATCCCTT	GCTCTCCAGT	TGGCCAAAGT	GAGGAGCCAA	GAGACACGCT	2160
	ACCAGAGCGG	CCTGGATGAC	CTCAAGATGA	CTGTGGAAGG	AGTTCCGGCT	CTGGGAAGTC	2220
	AGTACCAGAA	CCGAGTTCCG	GATACTCACA	GGCTCATCAC	TCAGATGCGG	CTGAGCCTGG	2280
	CAGAAAGTGA	AGCTTCCTGT	GGAAACACTA	ACATTCCTGC	CTCAGACCAC	TACGTGGGGC	2340
	CRAATGGCTT	TAAAGTCTGT	GCTCAGGAGG	CCACAAGATT	AGCAGAAAGC	CACGTGTAGT	2400
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	CAGCTGGTGG	CAAGGCCCTG	CATGAAGGAG	TGGAAGCCGG	AAGCGGTAGC	CCGACCGGTG	2520
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	CAAGGAGAGC	CACCTCAAGC	GAAATGGAAG	CAGATAGGTC	TTATCAGCAC	AGTCTCCGCC	2640
	TCTCTGATTG	AGTGTCTCGG	CTTCAGGGAG	TCAGTGATCA	GTCTTTTCAG	GTGGAAGGAG	2700
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	AGTTCAGCG	TACACAAAG	AATCTGGGAA	ACTGGAAAGA	AGAAGCACAG	CAGCTCTTAC	2820
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	AAGCAGAGC	ACAGAGAGCA	CTGAGTATGG	GCAATGCCAC	TTTTTATGAA	GTGAGAGCA	2940
	TCCTTAAAAA	CCTCAGAGAG	TTTGACCTGC	AGGTGGACAA	CAGAAAAGCA	GAAGCTGAAG	3000
30	AAGCCATGAA	GAGACTCTCC	TACATCAGCC	AGAAGGTTTC	AGATGCCAGT	GACAAGACCC	3060
	AGCAAGCAGA	AAGAGCCCTG	GGGAGCGCTG	CTGCTGATGC	ACAGAGGGCA	AAGAATGGGG	3120
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	AAGCAATAGT	CACAGCAGAT	GGAGCCTTGG	CCATGGAAAA	GGGACTGGCC	TCTCTGAAGA	3240
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	AGCAACAGTG	AAGCTGCCAT	AAATATTCT	CAACTGAGGT	TCTTGGGATA	CAGATCTCAG	3720
	GGCTCGGGAG	CCATGTCATG	TGAGTGGGTG	GGATGGGGAC	ATTTGAACAT	GTTTAATGGG	3780
	TATGCTCAGG	TCAACTGAGT	TGACCCCAT	CCTGATCCCA	TGGCCAGGTG	GTGTCTTAT	3840
	TGCACATAC	TCTTGTCTTC	CTGATGCTGG	GCAATGAAGC	AGATAGCACT	GGGTGTGAGA	3900
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	ATGAAATCT	TCCTAATGTC	AGAACAGAGT	GCAACCCAGT	CACACTGTGG	CCATTAATAAT	4140
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	TTACTCTCAT	CCTGCTTCCC	AACATATATT	TATTGAGTAC	CTACTGTGTG	CCAGGGGCTG	4740
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	CATGGGGGCA	CTTGAATTTT	GGCAAGGCTG	ACAGAGCTCT	GGGTGTGCA	CATTCTTTTG	4980
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	TACACCAAGT	GGGAATTGCT	GGAGGAACCA	GAGGCACCTC	CACCTTGGCT	GGGAAGACTA	5100
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Seq ID NO: 190 Protein sequence
Protein Accession #: NP_005553.1

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	HMLTDAGCTQ	DQRLDLSKCD	CDPAGLAGPC	DAGRCVCKPA	VTGERCDRCR	SGYINLDGGM	180
75	PBGCTQCFCY	GHSABCRSSA	EYSVHKITST	FHQDQVDGWA	VQENGSPAKL	QWSORHQDVF	240
	SSAQRLDPVY	FVAFAKFLGN	QQVSYGQSL	FDYRVDRGR	HPBAHDVILE	GAGLRITAPL	300
	MLGLKTLPCG	LTKTYTFRLL	KSPSNMWSQ	LSYFEYRRLI	RMLTALRIRA	TYGEYSTGYI	360
	DNVTILISAR	VSGAPAPWVE	QCILCPVYKG	QFOQDCASGY	KRDSARLGP	GTCLPCNCGQ	420
	GGACDPDTGD	CVSGDENPDI	ECADCPIGFY	MDPHDPRCK	PCPCHNGFSC	SUMPETEBVV	480
80	CNNCPFGVTG	ARCELADGY	FGDPFGEHGP	VRPCQPCQCN	MNVDPASAGN	CDRLTGRCLK	540
	CIHNTAGIYC	DQCKAGYFGD	PLAPNPADRC	RACNCPMGS	EPVGCSDGT	CVCKPFGGPG	600
	NCEBGAFCSP	ACYNQVKIQM	DQFMQQLQRM	EALISKAQGG	DGVVFDTELE	GRMQQABQAL	660
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	RLITQMQLSL	AESEASLGNT	NTPASHYVG	PNGPKSLAQE	ATRLAEGHVE	SASNMEQLTR	780

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 ADRSYQHSR LLDVSRLQG VSDQSPQVEB AKRIKQKADS LSTLVTRHMD BFKRTQKNLG 900
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 IEQSIGSIML EAVNTADGAL AMEKGLASLK SEMREVEGRL ERKELEFDTN MDAVQMVITE 1080
 AQKVDTRAKN AGVTIQTTLN TLDGLHLMD QPLSVDEEGL VLLBQKLSRA KTQINSQRLP 1140
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Seq ID NO: 391 DNA sequence

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Seq ID NO: 392 Protein sequence

Protein Accession #: AAD16433.1

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Coding sequence: 352..2820

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70 Seq ID NO: 394 Protein sequence
Protein Accession #: NP_006171.1

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SKRIPLANLQ IPNCGLPAN LAAPNLTVRR GKSLTLCSCV AGDPVENMYW DVGNLVSKNH 240
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Seq ID NO: 395 DNA sequence
 Nucleic Acid Accession #: AF410899
 Coding sequence: 483..2999

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Seq ID NO: 396 Protein sequence
 Protein Accession #: AAL67965.1

1 11 21 31 41 51

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 DTYRVGGHIM LPIRMPPES IMYRKFTTES DVWSLGVVLW EIFTYVKQFM YQLERNNEVIE 780
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Seq ID NO: 397 DNA sequence
 Nucleic Acid Accession #: AB052906
 Coding sequence: 74..814

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Seq ID NO: 398 Protein sequence
 Protein Accession #: BAB61048.1

1 11 21 31 41 51
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Seq ID NO: 399 DNA sequence
 Nucleic Acid Accession #: NM_001898.1
 Coding sequence: 57..482

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 ATTACTTCTT CGACGTAGAG GTGGGCGGCA CCATATGTAC CAGTCTCCAG CCCAATTGG 360
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 AGGGATCTGT GCCAGCCCAT TCGCACCAGC CACCAACCCAC TCCACACCCC TGTATGCTC 540
 CCACCCCTGG ACTGTGCGCC CCCACCTGCG GGGAGGCCCT CCCATGTGCC TGCCCAAGA 600
 GACAGACAGA GAAGGCTGCA GGAATCCTTT GTTGTCTCAG AGGGCGCTCT GCCCTCCCTC 660
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Seq ID NO: 400 Protein sequence
 Protein Accession #: NP_001889.1

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EIVEVPWENR RSLVKSRCQE S

Seq ID NO: 401 DNA sequence

Nucleic Acid Accession #: NM_003976.2

Coding sequence: 299-961

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	CTACTTCTGC	TGGGTGTAGT	CTAGCTGTGT	AGGCCCTCTG	TTCCTCAGCT	GGAGAAACTG	180
	GGGTGGCAGC	CCGGTCCCCC	ACAAAAGATA	ACTCATCTCT	TAATTTGCAA	GCTGCCTCAA	240
	CAGGAGGGTG	GGGGAACAGC	TCAACAATGG	CTGATGGGCG	CTCCTGTGTGT	TGATAGAGAT	300
	GGAACTTGGA	CTTGGAGGCC	TTCTCCAGCT	GTCCCACTGC	CCCTGGCCCTA	GGCGGCAGCC	360
15	TGCGCTGTGG	CCACCCCTGG	CGGCTCTGGC	TCTGCTGAGC	AGCGTGCAG	AGGCTTCCCT	420
	GGGCTCCGGG	CCCGCAGCCG	CTGCCCCCGG	CGAAGGCCCG	CCGCTGTGCC	TGGCGTCCCG	480
	CGCCGCCAC	CTGCCGGGGG	GACGCACGGC	CCGCTGGTGC	AGTGAAGAG	CCCGCGGGC	540
	GC CGCGCGCAG	CCTTCTCGGC	CCCGGCCCCC	GGCGCTGCA	CCCCCATCTG	CTCTTCCCCG	600
	CGCGGGCCGC	CGCGCGGGGG	CTGGGGGGCC	GGGCAGCCGC	GCTCGGGCAG	CGGGGGGGCG	660
20	GGGCTGCCGC	CTGCGCTCGC	AGCTGGTGCC	GGTGGGCGCG	CTCGGCTTGG	GCCACCGCTC	720
	CGACGAGCTG	GTGCGTTTCC	GCTTCTCTGAG	CGGCTCTTGC	CGCGCGCGCG	GCTCTCCACA	780
	CGACCTCAGC	CTGGCGGACC	TACTGGGCGC	CGGGGCCCTG	CGACCGCCCG	CGGGCTCCCG	840
	GCCCGTCAGC	CAGCCCTGCT	GCGAAGCCAC	GCGCTACGAA	GCGGTCTCCT	TCAAGGACGT	900
	CAACAGCACC	TGGAGAACCG	TGGACCGCCT	CTCGGCCACC	GCTCGGGGCT	GCTTGGGCTG	960
25	AGGGCTGCTG	CCAGCCCTTT	GCAGACTGGA	CCCTTACCGG	TGGCTCTTCC	TGCTGGGAC	1020
	CTTCCCGCTG	AGTCCCACTA	GCCAGCGGCC	TGAGCCAGGG	ACGAGGGCCT	CAAGCTGAG	1080
	AGGCCCTTAC	CGGTGGGTGA	TGGATATCAT	CCCGAACAG	GTGAAGGGAG	AACTGACTAG	1140
	CAGCCCCAGA	GCCCTCACCC	TGCGGATCCC	AGCCTAAAAG	ACACCAGAGA	CCTCAGCTAT	1200
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30	CCCTCTCTTG	ATGAACACTA	CAGTGGCTGA	GGCATCAGCC	CCCGCCAGG	CCCTGTAGGG	1320
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Seq ID NO: 402 Protein sequence

Protein Accession #: NP_003967.1

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	RGCLRLSLV	PVRALGLHR	SDBLVRFRC	SGSCRRARSP	HDLSLASLLG	AGALRPPPGS	180
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Seq ID NO: 403 DNA sequence

Nucleic Acid Accession #: NM_057091.1

Coding sequence: 783..1445

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	CGGTGTCTA	CAAACTCAAC	TCCCGGTTTC	CGTGCCTCTC	CACCGCTCGA	GTCTCTACT	240
	CTCCATATCC	GAGGGGGCCC	TCCAGCATC	TACCCGCCCT	CCAACTTCGG	GGGACCTAGC	300
55	CAAGCTAGGG	GGGACTAGAT	CCGACGGGTG	GAGCAGCCAG	GTGAGCCCGG	AAAGGTGGGG	360
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65	CCCTGGGGTC	CGCGCCCGCC	AGCCCTGCCC	CCCGGGAAGG	CCCCCGGCTT	GTCTGGCGGT	960
	CCCGCGCGGG	CCACTGCGCG	GGGGGACGCA	CGCGCCGCTG	GTGCAGTGGG	AGAGCCCGGC	1020
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	CCCGCGCGGG	CGCGCGCGCG	CGGGCTGGGG	GCCCGGGCAG	CCGCGCTCGG	GCAGCGGGGG	1140
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70	GCTCCGACGA	GCTGGTGGCT	TTCGCTTCT	GCAGCGGCTC	CTGCGCGCGC	GCGCGCTCTC	1260
	CACACGACCT	CAGCTTGGCC	AGCTTACTGG	GCGCGGGGCG	CGTGCAGCCG	CCCGCGGGCT	1320
	CCCGCGCGGT	CAGCCAGGCC	TGCTGCGGAC	CCAAGCGCTA	CGAAGCGGTC	TCTTCTATGG	1380
	ACGTCAACAG	CACCTGGAGA	ACCGTGGACC	GCTCTTCCGC	CACCGCTTGC	GGCTGCTTGG	1440
	CTGAGGGGCT	CGCTCCAGGG	CTTTCAGAGC	TGGACCTTCA	CCGGTGGGCTC	TTCTTGGCTG	1500
75	GGACCTTCCC	GCAGAGTCCC	ACTAGCCAGC	GGCTTCAGCC	AGGGACGAGG	GCTTCAAGCC	1560
	TGAGAGCGCC	CTACCGGGTG	GTGATGGATA	TGATCCCGCA	ACAGGTGAAG	GGACAACTGA	1620
	CTAGAGCGCC	CAGAGCCCTC	ACCTTCCGGA	TCCAGCCCTA	AAAGACACCA	GAGACCTCAG	1680
	CTATGGAGCC	CTTCCGACCC	ACTTCTCACA	GACTCTGGCA	CTGGCCAGGC	CTCGAACCTG	1740
80	GGACCCCTCC	TCTGATGAAC	ACTACAGTGG	CTGAGGCATC	AGCCCGCGCC	CAGGCCCTGT	1800
	AGGACAGCA	TTTGAAGGAC	ACATATTGCA	GTGCTTGGT	TGAAGGTGCC	TGTGCTGGAA	1860
	CTGGCCTGTA	CTCACTCATG	GGAGCTGGCC	CC			

Seq ID NO: 404 Protein sequence

Protein Accession #: NP_003967.1

1 11 21 31 41 51
 5 MELGLGLST LSHCPWPRRO PALWPTLAAL ALLSSVABAS LGSAPRSPAP REGPPFVLAS 60
 PAGHLPGGRT ARWCSGRARR PPPQSRPAP PPPAPPSALP RGGRAARAGG PGSRRARAAGA 120
 EGCRLNSQLV FVRALGLGHR SDELVRFRFC SGSCRRARSP HDLSLASLLG AGALRPPFPGS 180
 RPSVQPCCRP TRYBAVSFMD VNSTWRTVDR LSATACGCLG

10 Seq ID NO: 405 DNA sequence
 Nucleic Acid Accession #: NM_057160.1
 Coding sequence: 1..714

1 11 21 31 41 51
 15 ATGCCCCGGC TGATCTCAGC CCGAGGACAG CCCCTCCTTG AGGTCCCTTC TCCCCAAGCC 60
 CACCTGGGGT CCTCTTTTCT CCTGAGGCT CCACTTGGTC TCTCCGCGCA GCCTGCCCTG 120
 TGGCCACACC TGGCCGCTCT GGCTCTGCTG AGCAGCGTCG CAGAGGCTCT CCTGGGCTCC 180
 20 GCGCCCCGCA GCCCTGCCCC CCGCGAAGGC CCCCCTGCTG TCTTGGGCTC CCCCGCCGCG 240
 CACCTGCGCG GGGGACGACAC GGCCCGCTGG TGCAGTGGAA GAGCCCGGCG GCGCCGCGCG 300
 CAGCCTTCTC GCGCCGCGCC CCGCCGCTCT GCACCCCAT CTGCTCTTCC CCGCGGCGGC 360
 CGCGCGCGCG GCGCTGGGGG CCGGGCAGC CGGCTCGGG CAGCGGGGAC GCGGGGCTGC 420
 CGCTTGGCTC CGCAGCTGGT GCGGTGCGCG GCGCTCGGCT TGGGCCACCG CTCCGACGAG 480
 25 CTGGTGGCTT TCGCTTCTG CAGCGGCTCC TGCCGCGCGG CGCGCTCTCC ACACGACCTC 540
 AGCCTGGCCA GCTACTGGG CGCCGGGGCC CTGCGACCGC CCCCAGGCTC CCGCCCGCTC 600
 AGCCAGCCCT GCTGCGGACG CACCGCTTAC GAAGCGGTCT CCTTCATGGA CGTCAACAGC 660
 AOCCTGAGAA CCGTGGACCG CTTCTCGGCC ACGGCTTGGG GCTGCGTGGG CTGAGGGCTC 720
 GCTCCAGGCG TTTCAGACT GGACCTTAC CGGTGGCTCT TCTTGCCTGG GACCTCCCG 780
 30 CAGAGTCCCA CTAGCCAGCG GCTCAGCCA GGGACGAAGG CCTCAAAGCT GAGAGGCCCC 840
 TACCGTGGG TGATGCTAT CATCCCGAA CAGGTGAAGG GACAACTGAC TAGCAGCCCC 900
 AGAGCCCTCA CCTGCGGAT CCCAGCCTAA AAGACACCGG AGACCTCAGC TATGAGCCCC 960
 TTGCGACCCA CTTCTCAGC ACTCTGGCAC TGGCCAGGCC TCGAACCTGG GACCCCTCT 1020
 CTGATGAACA CTACAGTGGC TGAGGCATCA GCGCCCGGCC AGGCCCTGTA GGGACAGCAT 1080
 35 TTGAAGGACA CATATTGCAG TTGCTTGGTT GAAAGTGCCT GTGCTGGAAC TGGCCTGTAC 1140
 TCACTCATGG GAGCTGGCCC C

Seq ID NO: 406 Protein sequence
 Protein Accession #: NP_476501.1

1 11 21 31 41 51
 40 MPGLISARQQ PLLLEVLPPQA HLGALFLPEA PLGLSAQPAL WPTLAALALL SSVABASLGS 60
 APRSPAPREG PPPVLASPAQ HLPGGRTARW CSGRARRPPF QPSPAPPPP APPSALPRGG 120
 45 RAARAGGPGS NARAAGARGC RLRSQIVFVR ALGLGHRSD LVRFRFCGSG CRRARSPHDL 180
 SLASLLGAGA LRPPPGSRPV SQPCCRPTRY EAVSFMDVNS TWRTVDRISA TACGCLG

Seq ID NO: 407 DNA sequence
 Nucleic Acid Accession #: NM_057090.1
 Coding sequence: 29..715

1 11 21 31 41 51
 50 CTGATGGGCG CTCTGGTGT TGATAGAGAT GGAACITGGA CTGAGAGGCC TCTCCAGCCT 60
 GTCCACATGC CCTTGGGCTA GCGCGCAGGC TCCACTTGGT CTCTCGCGCC AGCCTGCCCT 120
 55 GTGGCCCAAC CTGGCCGCTC TGGCTCTGCT GAGCAGCGTC GCAGAGGCTT CCTTGGGCTC 180
 CGCGCCCGCG AGCCCTGCCC CCGCGGAAGG CCCCCTGCTG GTCTTGGCTT CCGCCCGCGG 240
 CCACTTGGCG GGGGAGAGCA CGGCCGCTG GTGCACTGGA AGAGCCCGGC GCGCCCGCGG 300
 GCACTTCTCT CGGCCCGCGC CCGCGCGGCC TGACCCDCA TCTGCTCTTC CCGCGCGGGG 360
 60 CGCGCGCGCG CGGCTGGGG GCGCGGCGAG CCGCGCTCGG GCAGCGGGGG CCGCGGGCTG 420
 CGCGCTGGCG TCGCAGCTGG TGCCGCTGGG CGCGCTCGGC CTGGGCACTT GCTCCGACGA 480
 GCTGGTGGCT TTCCGCTTCT GCAGCGGCTC CTGCGCGCGC GCGCGCTCTC CACACGACCT 540
 CAGCCTGGCC AGCTTACTGG GCGCGGGGGC CCGCGGAGCG CCGCGGGGCT CCGCGCCGCT 600
 CAGCCAGGCC TGCTGCGGAC CACCGCGCTA CGAAGCGGTC TCTTTCATGG ACGTCAACAG 660
 65 CACCTGGAGA ACCGTGGAAC GCCTCTCCGC CACCGCTGCG GCGTCCCTGG GCTGAGGGCT 720
 CGCTCCAGGG CTTTGCAGAC TGGACCTTGA CCGGTGGCTC TTCTGCTCTG GACCCCTCCC 780
 GCAGAGTCCC ACTAGCCAGC GCGCTCAGCC AGGGACGAAG GCGTCAAAGC TGAGAGGCCC 840
 CTACCGGTGG GTGATGGATA TCATCCCGGA ACAGGTGAAG GGCAACTGA CTAGCAGCCC 900
 CAGAGCCCTC ACCCTGGGGA TCCAGCCTA AAGACACCA GAGACCTCAG CTATGGAGCC 960
 70 CTTGCGACCC ACTTCTCACA GACTCTGGCA CTGCGCAGGC CTCGAACCTG GACCCCTCC 1020
 TCTGATGAAC ACTACAGTGG CTGAGGCATC AGCCCGCGCC CAGGCCCTGT AGGGACAGCA 1080
 TTTGAAGGAC ACATATTGCA GTTGTCTGGT TGAAGTGCC TGTCTGGAAC CTGGCCTGTA 1140
 TCACTCATGG GAGCTGGCCC CC

75 Seq ID NO: 408 Protein sequence
 Protein Accession #: NP_476431.1

1 11 21 31 41 51
 80 MELGLGLST LSHCPWPRRO AFLGLSAQPA LNPPTLAALAL LSSVABASLG SAPRSPAPRE 60
 GPPFVLASPA GHLPGGRTAR WCSGRARRPP PQSPRPAPPP PAPPASALPRG GRAARAGGPG 120
 SRARAGARG CRLRSQIVFV RALGLGHRSD ELVRFRFCGSG SCRARRSPHD LSLASLLGAG 180
 ALRPPPGSRP VSQPCCRPTR YEAVSFMDVN STWRTVDRIS ATACGCLG

Seq ID NO: 409 DNA sequence
Nucleic Acid Accession #: Eos sequence
Coding sequence: 1..1746

5	1	11	21	31	41	51	
	ATGCCACTGA	AGCATTATCT	CCTTTTCCTG	GTGGGCTGCC	AAGCCTGGGG	TGCAGGGTTG	60
	GCCTACCATG	GCTGCCCTAG	CGAGTGTACC	TGCTCCAGGG	CCTCCAGGT	GGAGTGCACC	120
10	GGGGCAGGCA	TGTGGCGGT	GCCACCCCT	CTGCCCTGGA	ACGCCATGAG	CCTGCAGATC	180
	CTCAACACGC	ACATCACTGA	ACTCAATGAG	TCCCGGTTC	TCAATATCTC	AGCCCTCATC	240
	GCCCTGAGGA	TGAGAAAGAA	TGAGCTGTCG	CGCATCAACG	CTGGGGCCTT	CCGAAACCTG	300
	GGCTGCTGCG	ACATCTCTAG	CCTGCCCAAC	AACAAGCTGC	AGGTTCCTGC	CATCGGCTC	360
	TTCCAGGGCC	TGGACAGCCT	TGAGTCTCTC	CTTCTGTCCA	GTAAACAGCT	GTTCAGATC	420
15	CAGCGCGGCC	ACTTCTCCCA	GTGCAGCAAC	CTCAAGGAGC	TGCAGTTGCA	CGGCAACCAC	480
	CTGGAAATACA	TCCCTGACGG	AGCCTTGAG	CACCTGGTAG	GACTCAGGAA	GCTCAATCTG	540
	GGCAAGAATA	GCCTCACCCA	CATCTCACCC	AGGCTCTTCC	AGCACCTGGG	CAATCTCCAG	600
	GTCTTCCGCG	TGTATGAGAA	CAGGCTCAAG	GATATCCCCA	TGGGCACTTT	TGATGGGCTT	660
	GTAAACCTGC	AGGAACCTGC	TCTACAGCAG	AACCAAGATG	GACTGCTCTC	CCCTGGTCTC	720
20	TTCCACAACA	ACCACAACCT	CCAGAGACTC	TACCTGTCCA	ACAACCCAT	CTCCAGCTG	780
	CCACCCAGCA	TCTTCATGCA	GCTGCCCCAG	CTCAACCGTC	TTACTCTCTT	TGGGAATTCC	840
	CTGAAGGAGC	TCTCTCTGGG	GATCTTGGGG	CCCATGCCCA	ACCTGCGGGA	GCTTGGGCTC	900
	TATGACAACT	TGCCCTCTTC	TCTACCCGAC	AATGTCTTCA	GCAACCTCCG	CCAGTTGCAG	960
	GTCTGTATTC	TAGCCGCAAA	TGATGATCAG	TTCTATCTCC	CGGGTGGCTT	CAACGGGCTA	1020
	ACGGAGCTTC	GGGAGCTGTC	CCTCCACACC	AACGCACTGC	AGGACCTGGA	CGGGAATGTC	1080
25	TTCCGCATGT	TGGCCAAACCT	GCAGAACATC	TCCCTGCAGA	ACAATCGCCT	CAGACAGCTC	1140
	CCAGGGAAATA	TCTTCCGCAA	CGTCAATGGC	CTCATGGCCA	TCCAGCTGCA	GAAACAACAG	1200
	CCTGGAAGAT	TGCCCTCTGG	CATCTTCAAT	CACCTGGGGA	AAGTGTGGA	GCTGGGCTC	1260
	TATGACAATC	CCTGGAGGTG	TGACTCAGAC	ATCCTTCCGC	TCCGCAACTG	GCTCCGCTC	1320
	AACCAAGCTTA	GGTTAGGGAC	GGACACTGTA	CCTGTGTGT	TCAGCCGAGC	CAATGTCCGA	1380
30	GGCCAGTCCC	TCAATATCAT	CAATGTCAAC	GTGCTGTTC	CAAGGTGCA	TGCTCCCTGAG	1440
	GTGCTAGTAT	ATCCAGAAAC	ACCATGGTAC	CCAGACACAC	CCAGTTACCC	TGACACCACA	1500
	TCGTCTCTCT	CTACCACTGA	GCTAACCAAG	CCTGTGGAAG	ACTACACTGA	TCTGACTACC	1560
	ATTCAAGTCA	CTGATGACCG	CAGGTTTGG	GGCATGACCC	AGGCCAGAG	CGGGCTGGCC	1620
	ATTGCCGCCA	TGTAAATGG	CATTGTCCCC	CTGCCCTGCT	CCCTGGCTGC	CTGCTCGGCC	1680
35	TGTGTCTGCT	GCAGAAGAG	GAGCCAACT	GTCTGATGC	AGATGAAGGC	ACCCAAATGAG	1740
	TGTAAAGAG	GCAGGCTGGA	GCAGGGCTGG	GGATGATGG	GACTGGAGGA	CCTGGGAATT	1800
	TCTCTTTCT	GGCTCCACCC	CTGGGTCCAT	GGAGCTTCC	CGTGAATGCT	CTTTCTGGCC	1860
	CTAGATAAAG	GTGTGCTTAC	CTCTTCTGTA	CTTGCTGAT	TCTCCGCTAG	AGAAGCAGGT	1920
40	CGTGCCGGAC	CTTCTTACAA	TCAGGAAGAT	AGATCCAAT	GGCCATGGCA	AAAGCCCTGG	1980
	GGATTTCCGA	TTCATACCCC	TGGGCTTCT	TCGAGAGGGC	TCTTCTTCCA	AATCTTCCCC	2040
	ACCTGTCTCT	CAGGAACAGC	CTTCCCTGGC	CCCAGGCCCC	CTCCGGGCTT	CTGTAGACTC	2100
	AGTTAGTCCA	CAGCCTGCTC	ACTTCTGGGG	AATAGTCTC	CGCTGAGATA	GCCCTCTCTG	2160
	CCTAAGTATT	ATGTAAGTGG	ATTTCCCTTC	TTTGTGTTCT	CTGTGTTGAG	CTATGGCTTG	2220
	ACCCAGCATG	TCCCTCAAAA	TGAAGTTCT	CCCTGTGATT	TTCTGCTCTT	GAAGGAGGGG	2280
45	TGAATCTCT	CCTCAAGAAA	GACTTCAAA	CATTAACTG	GTTTCTTAAG	AGCCGTCAAT	2340
	CAGCTCTGTT	TTGGGGATGC	TATGAAGAG	AGAAGGAAAA	TGATGCCGCT	CAGTTCCTGG	2400
	AGACAGAGAA	GGCGTCACTA	GTGCTTCACT	TGTGATTTT	ATCTGGAAAA	GGAGAAACAA	2460
	CCCCAGACAA	GCAGCTCAG	CTTTTAGAG	AAGGATATTT	CCAAACTGCA	AATTTGCTTT	2520
	TGAAAAGTTT	AGCCCTTTAA	GGATGAAAT	CATGTAGAAT	TTTGGACTTC	TAAAAACATT	2580
50	AAAATCAGCT	TATTAATACG	GGATAGAGAA	AGAAATCTGG	TGCCITGGGG	TCCCTGTGTT	2640
	CACCCCTAGA	GTTTGTTTTA	AAATTTTAA	TTGAAGCATG	TGAAGTGTAC	GTGCAGAAAA	2700
	GTGGGAACAT	GATAGTGTAT	GGCTTGGTGG	ATTTTTCAAA	ACTGAACATA	CCTGTGTGAT	2760
	CAGCATCTAG	ACCCAGACCC	AGAGCATCAC	AAATATCCCC	CATCCTGGGC	TTTTCCAGAA	2820
	GGAGATGGGG	GCTTCTBAAG	ATGGACTTAC	CTGGGACCTG	CCCCCATGGA	GGCAGGAGCG	2880
55	TCCCCCCACA	GTACGCTGT	GCAAGGGCCC	CGTGGCCAGG	GGTGGAGGAG	AATATGTGGG	2940
	TGTGGACAGG	ATGGGAGACT	GTGGCCTGAA	CAGGAGATTT	TATTTATATCT	GGAGACCTCT	3000
	AGAGACCCCT	AGACCTGGGG	CACCATGGCT	GGCCAGGTCA	GAGCATCTCT	GACTGCAGAG	3060
	GTCCGTGCGG	CCACACCTCT	TCCCTGCCCA	GCAAGTTGTC	TGCGGCTCAT	CGGAGGCCCC	3120
	TCCGCTTGGG	GCCCTCTATG	GACGTGATAT	GCCTGTATCT	GTFTTTAATT	TTCTATCTTC	3180
60	ACTTAGGGGA	AGTGAAATCG	CTCAGAGATG	AGATCCTTTA	ATTGAAAAAG	AGCTGTAAAG	3240
	GAATCTAGTG	TCTTTCTAAT	GTGTTAAAT	TCTCCATCAA	CATCACAGTC	AGCTGGCAGC	3300
	TGAATTTAG	AATCTTCACT	ACAGCAGGGG	ACACGGGGGT	ACACCCATGG	GTCACTCTGG	3360
	GTCTGGGGGC	TCCCTGGAGC	TCTCTCTGGG	TGTGGCTTGG	TTAGGAGTTG	AGTTGTTTGC	3420
	TCCAGGGTTA	TCTCTCTCT	CBAGTCAAG	TCACAGGAAT	ACCTGCCCTC	TCTGGCTTTC	3480
65	CTGCTATACA	CATATTCAAA	TGGGCTTCAA	GAAGTTAGGC	TCATGGCAAC	GTGTGCTTTT	3540
	CTCTGGACAA	CTGGCCCACT	TTACAGTGAA	ATGGAGAAAT	TCAGGTCTTC	ACGCTGCCCC	3600
	AGGAAGAAGC	TTAGCTGAC	TCACCGGGGA	TCTGGAAATC	CACGACCAAT	CCGATCGGCC	3660
	TCTTATTAGC	TCCCGCTTCC	ACAAGACACC	TGTGCTTTGG	AAATCCACCA	CCAATCCCGA	3720
	TCCGCTCTTA	TTAGCTCCCC	GCTCCACAG	ACACCTGTGA	TCTGGAAATC	TACCAACCAAT	3780
70	CCGATCGGC	TCTTATTAGC	TCCCGCTTCC	ACAGACACC	TGTGACATCC	TCCAGGCTCA	3840
	CAGGAGCAGG	TGCTGACAGC	TTTTCCCTTC	CAGTTCTTGC	ACAAAAAGTG	TCCAGAGGGC	3900
	TGTTTGCATA	CATCTTGTGCT	TTTCAACCTC	TGTCCACAGG	AATCTAGGAG	AGCTGAGGCT	3960
	AGATGAGGCC	CGTCAAGATC	AAGAGATGTC	ATCCCGCCAG	GGTCTCCAGG	GCAATTTCCAC	4020
	ACTATTGGTG	GCACCTGGAG	GACATGCAAC	AAGGCTTGCC	AGAGCCAACA	GGAGTGAGGC	4080
75	CCAGAGCATG	GCACATGAGC	ATCACCCGCT	GATGGTGGCC	TGCTGTGCTT	GGTCCCAACA	4140
	GGGGCATCCC	GGCCCTTACC	CCTCCAGACA	GGAGGATGG	GTTTGCCCAT	AGACCTGTCT	4200
	GGTGTCTCTG	TGAGTGGCTT	CCAGATGTCT	TTGTGCATAG	GCACAAGTGG	GGCAGGGCTG	4260
	GAGGGAGGTT	GGAAACCTCA	TGATCCGGTG	GGCCCTGCCA	ATCTTAACCT	AGAACCTCTA	4320
	GGTATCTCTG	GCAGTACCCA	TGACATTTGA	GCACCTTCTT	CTCCAGCCAG	AGGCTGACCT	4380
80	GAGGGGCCACT	GTCTCTAGAT	GACACCAACC	AGGAGCACCC	TAGGTGAGGG	GTGAGGGCCC	4440
	CCTTATGTGA	ACCTCTTGGC	TCTTCTTCTC	TCCCATCAGA	GTGGTTGGAT	GGAGCCATTG	4500
	GGCTCTTTT	CTTCAAGCGG	CCCTTCAACC	TCTCTGCACC	ATGTTGTCTG	GCTGAGGAGC	4560
	TACTAGAAAA	GCTGAGTGGG	GTCTCTTCTC	CAACAGGATG	ATGCATTTGC	TCAATTTCTA	4620
	GGGCTGGAAAT	GAGCCGGCTG	GTCCCCACGA	AAGCTGGAGT	GGGGTACAGA	GTTCAATTTT	4680

CCCTCTGTGT TACAGCTCCT TGACAGTCCC ACGCCCATCT GGAGTGGGAG CTGGGAGTTA 4740
 GTGTGTGGAGA AGAAACAACA AAAGCCCAATT AGAACCACCTA TTTTAAAAA GTGCTTACTG 4800
 TGACAGATA CYCTTCAAGC ACTGGAGCTG GATTCTCTCT CTAGCCCTCA GCACCCCTGC 4860
 5 GGTAGGAGTG CCGCTCTAC CCACITGTGA TGGGGTACAG AGGCACTTGC TCTTCGCAT 4920
 GGTGTTCAT AGGCTGGGAG TTTTATTAT CTCTTCAAACT TTTGTACAG AGCTCATGGC 4980
 TTGTCTTGGG CTTTCTCAT TAAACCAAG GAAATGGAAG CCATTCCTCT GTTGTCTTCC 5040
 TTAGTCTTGG TCATCAGAAC CTCACCTGGT ACCATATAGA TCAAAAGCTT TGTAAACCACA 5100
 GGAAAAATA AACTCTTCCA TCCCTTAAAG AATAGAATAG TTTGTCCCTC TCATGGGAAT 5160
 10 TGGGCTGTAT GTATATTGTT CTTCCTCCTT AGAATTTAGA GATACAAGAG TTCTACTTAG 5220
 AACTTTTCAT GGACACAATT TCCACAACCT TTCAGATGCT GATGTAGAGC TATTTGGGAAA 5280
 GAACCTCCAA ACTCAGGAAG TTTGCAGAGA GCAGACAGCT AGAGATAACT CGGACCCAG 5340
 AGTTGGTCTGA CAGATGTAG ATGTATCCTA GCTTTTAGCC ATAAACCACT CAAAGATTCA 5400
 GCGCCCAAGT CCGACAGTCA GAACGAATC TGCCTTGTG GGAAGCCAGC AGTGGCCTTG 5460
 15 GGAAGGAAGC CATGGCTGTG GTTCAGAGAG GGTGGGCTGG CAAGCCACTT CCGGGGAAAA 5520
 TCTCTTCCGC CCGAGCTTTC TTCTTCTCTT AAGGAGAGAT TGTCTCTACC AACCCGCTGC 5580
 CTTCATGCTG CTTTCAAGAG TAGATCATGT TTGCTTGTCT TAGAGAATTA CTGCAAAATCA 5640
 GCGCCAGTGC TTGGCGATGC ATTACAGAT TTCTAGGCC TCAGGCTTT GTAGAGTGTG 5700
 AGCCCTGGTG GCGAGGCTG GGGGCTCTGT CTTCTGTGTG ATGCTGCTTG TATTCATT 5760
 20 GGTGTACAGA ATCAACAATA AATAATATAC ATGTAT

Seq ID NO: 410 Protein sequence

Protein Accession #: BAB84587.1

1 11 21 31 41 51
 | | | | |
 MFLEKYLILL VQCAWAGAGL AYEGCPSECT CSRASQVECT GARIVAVPTP LEWNAMSLQI 60
 INTHITELNE SPFLINISALI ALRIEKNEIS RITPGAFRNL GSELYLSLAN NKLQVLPGL 120
 FQGLDSLESIL LLSNQILLQI QPAHFSQCSN LKELQLHGNH LEYIPDGAFD HLVGLTKLNL 180
 30 GKNSLTHISP RVQHLGNLQL VLRLYENRLT DIPMGTFDGL VNLQELALQ EQIGLLSPGL 240
 FHNENLQRL YLSNNHISQL PPSIFMQLPO LNRLLPLGNS LKELSLGIFG PMPNIRELNL 300
 YNHHISLEPD NVFSNRLRLQL VLILSRNQIS FISPGAFNGL TELRELSLHT NALQDLGDNV 360
 FEMLANLQNI SLQNNRLRLQL PGNIFANVNG LMAIQLQNNQ LENLPLGIFD HLGKLCLELRL 420
 YDNPRCDSL ILPLRWLLLL NQPRLGTDIV PVCPSANVR GQSLIINVN VAVPSVEVPE 480
 35 VPSYPETFWY PUPSPYDDTT SVSSTITLTS PVEDYIDLTT IQVTDRESVH GMTQAQSGLA 540
 IAAIVIGIVA LACSLAACVG CCCCRRSQ VLMQKAFNE C

Seq ID NO: 411 DNA sequence

Nucleic Acid Accession #: XM_098151

Coding sequence: 1..447

1 11 21 31 41 51
 | | | | |
 ATGATGCATT TGCTCAATTC TCAGGGCTGG AATGAGCCGG CTGGTCCCCC AGAAAGCTGG 60
 AGTGGGGTAC AGAGTTCAGT TTTCTCTCTT GTTACAGCT CCTTGACAGT CCCACGCCCA 120
 45 TCTGGAGTGG GAGCTGGGAG TCAGTGTGG AGAAGAAACA ACARAAGCCA ATTAGAACCA 180
 CTATTTTAA AAAGTGTCTA CTGTGCACAG ATACTCTTCA AGCACTGGAC GTGGATTCTC 240
 TCTCTAGCCC TCAGCACCCC TGCGGTAGGA GTGCCGCCCTC TACCCACTTG TSATGGGGTA 300
 CAGAGGCAC TGCCTTCTG CATGGTGTTC AATAGGCTGG GAGTTTATT TATCTCTTCA 360
 50 AACTTTGTAC AAGAGCTCAT GGCTTGTCTT GGCCTTCTGT CATTAAACCA AAGGAAATGG 420
 AAGCATTTCC CTTGTGTGTC TCCTTAG

Seq ID NO: 412 Protein sequence

Protein Accession #: XP_098151

1 11 21 31 41 51
 | | | | |
 MMHLNSQGW NEPAQPPSW SGVQSSVFLS VYBSLTVPRP SGVGAQSQCW RNNKSKLEP 60
 LFLKSAVCAQ ILFKHWITWL SLALSTPAVG VPPLPTCDGV QHLLIFCMVF NRIQVLFISS 120
 60 NFVQELMACL GLSSLNQRKW KPPFCCSP

Seq ID NO: 413 DNA sequence

Nucleic Acid Accession #: NM_002658.1

Coding sequence: 77..1372

1 11 21 31 41 51
 | | | | |
 GTCCCCGAG CCGCTGCGG CCTTCTGCTC GCAGGCCACC GAGGCGCGCG CCGTCTAGCG 60
 CCCCGACCTC GCCACCATGA GAGCCCTGCT GGCGCGCTCG CTCTCTGCG TCCCTGGTGT 120
 70 GAGGACTCC AAGGCAGCA ATGAACCTCA TCAAGTTCCA TCGAAGCTGG ACTGTCTAAA 180
 TGGAGGAACA TGTGTGTCCA ACAAGTACTT CTCCACATT CACTGTGTGA ACTGCCCAA 240
 GAAATTCGGA GGGCAGCACT GTGAATAGA TAAGTCAAAA ACCTGTCTATG AGGGGAATGG 300
 TCACCTTTAC CAGGGAAGG CCAGCACTGA CACCATGGGC CGGCCCTGCC TGCCCTGGAA 360
 CTCGTCCACT GTCTTACAG AAACGTACCA TGCCACAGA TCTGATGCTC TTCAGCTGGG 420
 CCTGGGGAAA CATAATTACT GCAGGAACCC AGACAACCGG AGGCGACCTT GGTGCTATGT 480
 75 GCAGGTGGGC CTAAAGCCGC TTGTCCAAGA GTGCATGGTG CATGACTGCG CAGATGGAAA 540
 AAAGCCCTCC TCTCTTCCAG AAGAATTAAA ATTTCACTGT GGCCTAAAAG CTCTGAGGCC 600
 CGCTTTAAG ATTATTGGGG GAGAATTAC CACCATCGAG AACCAAGCCCT GGTGTGCGGC 660
 CATCTACAGG AGGCACCGGG GGGGCTCTGT CACTTACGAG TGTGGAGGCA GCCTCATCAG 720
 CCTTGTCTGG GTGATCAGCG CCACACACTG CTTCAATTGAT TACCCAAAGA AGGAGGACTA 780
 80 CATGCTCTAC CTGGGTGCTT CRAAGCTTAA CTCCACACAG CAAGGGGAGA TGAAGTTTGA 840
 GGTGGAAGAC CTCATCTTAC ACAAGGACTA CAGCGCTGAC AGCTTGTCTC ACCACAACGA 900
 CATGCGCTTG CTGAAGATCC GTTCCAAGGA GGGCAGGTGT GCGCAGCCAT CCGGACTAT 960
 ACAGACCATC TGCCCTGCCCT CGATGTATAA CGATCCCCAG TTGGGACAAA GCTGTGAGAT 1020
 CACTGGCTTT GGAAGAGAGA ATTCTACCGA CTATCTCTAT CCGGAGCAGC TGAAGATGAC 1080

TTTTGTGAAG CTGATTTCOC ACCGGGAGTG TCAGCAGCCC CACTACTACG GCTCTGAAGT 1140
 CACCACCAAA ATGCTATGTG CTGCTGACCC CCAATGGAAA ACAGATTCTT GCCAGGGAGA 1200
 CTCAGGGGGA CCCCTCGTCT GTTCCCTCCA AGGCCGCGATG ACTTTGACTG GAATTTGTAG 1260
 CTGGGGGCGT GGAATGTGCC TGAAGGACAA GCCAGGCGTC TACACGAGAG TCTCACACTT 1320
 CTGAGGCGGT GGAATGTGCC TGAAGGACAA GCCAGGCGTC TACACGAGAG TCTCACACTT 1380
 CTTACCTCTG ATCCGCGATG ACACCAAGGA AGAGAAATGGC CTGCGCCCTCT GAGGGTCCCC 1440
 AGGGAGGAAA CCGGCACAC CCGCTTCTT GCTGGTTGTC ATTTTTCGAG TAGAGTCATC 1500
 TCCATCAGCT GTAAGAGAG ACTGGGAAGA TAGGCTCTGC ACAGATGGAT TTGCTGTGG 1560
 CACCACCAGG GTGAACGACA ATAGCTTTAC CCTCAGGAT AGGCTGGGT GCTGGCTGCC 1620
 CAGACCTCTT GGCCAGGATG GAGGGGTGGT CCTGACTCAA CATGTTACTG ACCAGCAACT 1680
 TGTCTTTTTC TGGACTGAAG CCTGCAGGAG TTAAGAAAGG CAGGGCTCTT CCTGTGCATG 1740
 GGCTCGAAGG GAGAGCCAGC TCCCCGACG GGTGGGCATT TGTGAGGCC ATGGTTGAGA 1800
 AATGATAAAT TTCCCAATTA GGAAGGTAA GCAGCTGAGG TCTCTGAGG GAGCTTAGCC 1860
 AATGTGGAG CAGCGTTTG GGGAGCAGAG AACTAACGA CTTGAGGCA GGGCTCTGAT 1920
 ATTCATGAA TGTATCAGGA AATATATATG TGTGTGTATG TTTGCACACT TGTGTGTGG 1980
 CTGTGAGTG TAAGTGTGAG TAAGAGCTGG TGCTGATTG TTAAGTCTAA ATATTTCTT 2040
 AAACTGTGTG GACTGTGATG CCAACAGAG TGGTCTTCT GGAGAGGTTA TAGGTCACTC 2100
 CTGGGGCTCT TTGGGTCCOC CACGTGACAG TGCTGGGAA TGTACTTATT CTGACAGCATG 2160
 ACCGTGAGC AGCACTGTCT CAGTTTCACT TTCACATAGA TGTCCCTTTC TTGCGCAGTT 2220
 ATCCCTTCTT TTTAGCCTAG TTCATCCAAT CCTCACTGGG TGCGGTGAGG ACCACTCTT 2280
 ACCTGGAATA TTTATATTTC ACTATTTTTA TTTATATTTT TGTATTTTAA AATAAAGTG 2340
 ATCAATAAAA TGTGATTTT CTGA

Seq ID NO: 414 Protein sequence
 Protein Accession #: NP_002649.1

1 11 21 31 41 51
 MRALLARLLL CVLVVSDSKG SNELHQVPSN CDCINGGTCV SNKYFSNIHW CNCPKFGGQ 60
 HCEIDKSKTG YEGNGHFYRG KASTDTMGRP CLPWN SATVL QQTYHAHRED ALQLGLGKH 120
 YCRNEDMRKR PWCYVQVGLK PLVQECMVHD CADGKPSSE PSELKPCQCG KTLRPFKII 180
 GSGFTTIENQ PWFPAIYRKH RGGSVTVVCG GSLISPCNVI SATHCFIDYP KKEDYIVYLG 240
 RSRNLSNTQG EKFVFNLI LHKDYSADTL AHNDIALLK IRSKSGRCAG PSRTIQTICL 300
 PSMYNDPQFG TSCBETGFGK ENSTDVLYPE QLKMTIVKLI SHRECOQPHY YGSEVTTKML 360
 CAADPQMKTD SCQDSGGPL VCSLQGRMTL TGIVSWGRGC ALKDKEPVYT RVSHFLPWIR 420
 SHTKRENGLA L

Seq ID NO: 415 DNA sequence
 Nucleic Acid Accession #: NM_024422.1
 Coding sequence: 202..2907

1 11 21 31 41 51
 CGCCAAAGGA AAAGCCOCTT GGATGAGAGG CAGGCGCTTC AGAGAAGCTA AGAAAAGCAC 60
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 GCTCCGCGCG CCGCCOCTTC CCGCGGAGC CCTCTTACCC CCGCCGAGC CTCGCGCGCG 180
 GAGCTGCGCC GAGCCCTCTC CATGGAGGCA GCGCGCCCTT CCGCTCTCTG GAACGGAGCC 240
 CTCTGCGCGC GCTCTCTGCT GACCCCTCGC ATCTTAATAT TTGCCAGTGA TGCCCTGCAA 300
 AATGTGACAT TACATGTTCC CTCCAACTA GATGCGGAGA AACTTGTGTT TAGAGTTAAC 360
 CTGAAAGAGT GCTTTACAGC TGCAAACTTA ATTCACTCAA GTGATCTGTA CTCCAAATT 420
 TTGGAGGATG GTTCAGTCTA TACAACAAT ACTATTCTAT TGTCTCTGGA GAAGAGAGT 480
 TTTACCATAT TACTTTCCAA CATGAGAAC CAAGAAAAGA AGAAAATATT TGCTTTTGTG 540
 GAGCATCAA CAAGGCTCTT AAAGAAAAGA CATACTAAG AAAAGTTCT AAGCGCGCGC 600
 AAGAGAGAT GGGCTCCAT TCTTGTGCG ATGCTAGAAA ACTCCTGGG TCTTTTCCA 660
 CTTTCTCTTC AACAGGTTCA ATCTGACAG GCGCAAACT ATACCTATA CTATTCATA 720
 AGAGGCTCTG GAGTTGACCA AGAAGCTCGG AATTATTATT ATGTGGAGAG AGACACTGGA 780
 AACTTGTATT GTACTGTGCT TGTAGATGCT GAGCAGTATG AATCTTTTGA GATAATTGCC 840
 TTTGCAACAA CTCAGATGG GTATCTCCA GAACCTCCAC TGCCCTTAAT AATCAAAATA 900
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 GAGTTAATTG ACAAGTACCA GTTGAAAATA AAGTACAA AGATGATGG TCGATTTTT 1200
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 GAAGGAGTTT TTTGTGATG TAAGCCTTTG AATTATGAAG AAAAGCAACA GATGATCTG 1500
 CAAATGGTG TAGTTAATGA AGCTCCATT TCCAGAGAG CTAGTCCAAG ATCAGCCATG 1560
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 AAAGCATATG ACCAGAAAC AAGAGTAGC AGTGGCATRA GGTATAAGAA ATTAACATG 1740
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 CAAGGAGGGA GAACATGTAC GGGGACACTG GGCATTATAC TTCAAGACGT GAATGATAAC 1920
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 ATTGTTGCGG TTGATCTCTG TGAGCCTATC CATGGCCAC CTTTGTACTT TAGTCTGGAG 2040
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 GAAATGACT GCACACATC TGTAGATCCA AGGATTGGCG GTGAGGAGT ACAACTTGG 2280
 AAGTGGGCGA TCTCTGCAAT ATTGTGGG ACAGCATTCG TCTTTTGCAT CCGTTTACG 2340
 CTGCTCTG TGCTCTCTG GACCTCTAAA CAACCAAAAG TAATCTCTGA TGATTAGCC 2400
 CAGCAGAAC TAAATGTATC AAACACAGAA GCTCCTGGAG ATGACAAAG GTATCTGCG 2460
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 CTAGCAGAAG CATGCATGAA GAGATGAGTG TGTTCATAATA AGTCTCTGAA AGCCAGTGGC 2940
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 AGACACTATA AACAAATPACA CAAATTTTTC AATTTTTCAC TATTTTAAAA TTACTTATCT 3120
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 ATGACAAAG CCAATTTATA GTGCAATAAA ATGTAATTA TTCAAGTCTT TATTATAGAC 3240
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 AATTAAAGTGT TCATGTGAGT CTTGGAAACT GTTGTTTTCC TGAACATCTA AAGTGTGTAG 3360
 ACTGCATTCT TGATATTATT TTATCTTGT AATGTGACCT TTTCACTGTG CAAAGGGAGA 3420
 TTTCTAGCCA GGCATTGACT ATTACAATTT CATT

Seq ID NO: 416 Protein sequence
 Protein Accession #: NP_077740.1

1 11 21 31 41 51
 MEAARPSGSH NGALCRLLLL TLAILIFASD ACKNVTILHVF SKLDAEKLVG RVNLKECFTA 60
 ANLIHSEDFD FQILEDGDSVY TTNITLLSSE KRSFTILLSN TENQERKKIF VFLEHQTKVL 120
 KKRHTKEKVL RRARRRWAPI PCSMLENSLG PPFLFLQVQV SDTAQNYTYY YSIRGPGVDQ 180
 EPRNLFYVER DYNLYCYRXP VDRQYVESPE ILAFATFPDG YTFELPLPLI IKIEDENDNY 240
 PIFTEETIIF TIFENCRTGT TVGQVCATDK DEPDTHNRL KYSILGQVPP SPTLFSMHPT 300
 TGVITTTSSQ LDRELIDKYQ LKIKVQDMOG QYFGLQTTST CIINIDVDND HLPFTFRTSY 360
 VTSVENTVD VEILRVTVSD KDLVNTANWR ANYTILKNE NGNFKIVTDA KINEGVLCVV 420
 KPLNYEKKQQ MTLQIGVVNE APFSREASPR SAMSTATVIV NVEDQDEGPE CNPPIQTVRM 480
 KENASVGTTS NGYKAYDPET RSSSGIRYKK LTDEPTGNVTI DENTGSIKVF RSLDREARTI 540
 KNGIYNITVL ASDQGGRTCT GTLGIILQDV NDNPPFIPKK TVIICKPIWS SAEIVAVDDP 600
 EPIHGPPFDF SLESSTSEVQ RMWRLKAIND TAARLSYOND PPFSGYVVI TVDRRLQWSS 660
 VTSLDVLTCD CITENDCTHR VDFRIGGGGV QLGKWAIIAI LLGIALLPFI LFTLVCGASG 720
 TSQPKVIPD DLAQQMLIVS NTEAPGDDRV YSANGFTTQT VGASAGGVCG TVGSGIKNGG 780
 QETLEWVKGH HQTSSESCRA GHHTLDSCR GGHTEVINC R YTYSEWHSPT QPRLGEKVYL 840
 CNQDENHKEA QDIVLYTNYE GRGSVAGSVG CCSERQEEDG LEFLDNLEPK FRTLAERCMK 900
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Seq ID NO: 417 DNA sequence
 Nucleic Acid Accession #: NM_004949.1
 Coding sequence: 202..2745

1 11 21 31 41 51
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 GCTCCGCGCG CGGCGCTCTCG CCGCGGAGC CCTCTACCTC CGGCGCGAGG CTCGGCCCGC 180
 GACTTGCCTC GAGCCCTCTC CATGGAGGCA GCCCGCCCTT CCGGCTCTCT GAACGGAGCT 240
 CTCCTCGGCG TGCTCTCTGCT GACCTCGCGG ATCTTAATAT TTGCGAGTGA TGCCGTCAAA 300
 AATGTGACAT TACATGTCTC CTCCAAACCT GATGCGGAGA AACTTGTCTG TAGAGTTAAC 360
 CTGAAAGAGT GCTTTACAGC TGCAAAATCT ATTCAATCAA GTGATCTGTA CTTCCAAATT 420
 TTGGAGGATG GTTCAGTCTA TACAACAAT ACTATTCTAT TGTCTCTGGA GAAGAGAGAT 480
 TTTACCATAT TACTTTCCAA CACTGAGAAC CAGAAAAGA AGAAAATATT TGTCTTTTG 540
 GAGCATCAAA CAAAGGTCTCT AAAGAAAAGA CATACTAAAG AAAAAGTTCT AAGGCGCGCC 600
 AAGAGAGAGT GGGCTCCAAAT TCCTTGTCTG ATGCTAGAAA ACTCCTTGGG TCCTTTTCCA 660
 CTTTTCCTTC AACAGGTCTA ATCTGACAGG GCCCAAAC ATACCATATA CTATTCCATA 720
 AGAGGTCTCT GAGTTGACCA AGAACCTCGG AATTATTTT ATGTGGAGAG AGACACTGGA 780
 AACTTGTATT GTACTCGTCC TGTAGATCTT GAGCAGTATG AATCTTTTGA GATAATTGCC 840
 TTTGCAACAA CTCAGATGAG GTATACTCCA GAACCTCCAC TGCCCTTAAT AATCAAAATA 900
 GAGGATGAAA ATGATACTA CCCAATTTT ACAGAGAAA CTTATACCTT TACAATTTT 960
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 GAGTTAATTG ACAAGTACCA GTTGAAAATA AAGTACAAG ACATGGATGG TCAATTTT 1200
 GGTCTACAGA CAATCTCAAC TTGTATCATT AACATTGATG ATGTAAATGA CCCTTGCCA 1260
 ACATTTACTG GTACTCTTCA TGTGACATCA GTGGAAGAAA ATACAGTTGA TGTGGAAATC 1320
 TTACGAGTTA CTGTTGAGGA TAAGGACTTA GTGAATCTG CTAAGTGGAG AGCTAATTAT 1380
 ACCATTTTAA AGGGCAATGA AAATGGCAAT TTTAAATTTG TAACAGATGC CAAAACCAAT 1440
 GAAGGAGTTC TTTGTGTAGT TAAGCCTTTG AATTAATGAG AAAAGCACA GATGATCTTG 1500
 CAAATTTGAT TAGTTAATGA AGCTCCATTT TCAGAGAGG CTAGTCCAG ATCAGCCATG 1560
 AGCAGAGCAA GAGTGGACTT TAATGTAGAA GATCAGGATG AGGCGCCCTG GTGTAACTCT 1620
 CCAATACAGA CTGTTGCGAT GAAAGAAAAT GCAGAGTGG GAACAACAG CAATGGATAT 1680
 AAAGCATATG ACCCAGAAAC AAGAAGTAGC AGTGGCATAA GGTATAAGAA ATTAAGTAT 1740
 CCAACAGGGT GGGTCACCAT TGATGAAANT ACAGGATCAA TCAAGTTT CAGAGCCTG 1800
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 CAGGAGGGGA GACATGTAC GGGGACACTG GGCATTATAC TTCAAGACGT GAATGATAAC 1920
 AGCCCATTC A TACCTAAAAA GACAGTGATC ATCTGCAAC CCACCATGTC ATCTGCGGAG 1980
 ATTGTTCCSG TTGATCTGTA TGAGCCTATC CATGGCCAC CCTTTGACTT TAGTCTGGAG 2040
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 GAAATGACT GCACACATG TGTAGATCCA AGGATTGGCG GTGGAGGAGT ACAACTTGA 2280
 AAGTGGGCCA TCCTTGCAAT ATTGTTGGGC ATGACATGTC TCITTTGATC CCGTTTACG 2340

CTGGTCTGTG GGGCTTCIGG GACGTCTAAA CAACCAAAAG TAATTCCTGA TGATTAGCC 2400
 CAGCAGAAC TAATTGTATC AAACACAGAA GCTCCTGGAG ATGACAAAGT GTATTCTGGG 2460
 AATGGCTTCA CAACCCAAAC TGTGGGCGCT TCTGCTCAGG GAGTTTGTGG CACCGTGGGA 2520
 TCAGGAATCA AAACCGGAGG TCAGGAGACC ATCGAAATGG TGAAAGGAGG ACACGAGACC 2580
 TCGGAATCCT GCGGGGGGGC TGGCCACCAT CACACCCTGG ACTCCTGCAG GGGAGGACAC 2640
 ACGGAGGTGG ACAACTGCAG ATACACTTAC TCGGAGTGGC ACAGTTTAC TCAGCCCGGT 2700
 CTGGTGAAG AATCCATTAG AGGACACACT CTGATTAAAA ATTAAACAAT GAAAGAAAGT 2760
 GTATCTGTGT AATCAAGATG AAAATCACA GCATGCCCAA GACTATGTCC TGACATATAA 2820
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 AGATGGGCTT GAATTTTGG AIAATTTGGA GCCCAATTT AGGACACTAG CAGAAGCATG 2940
 CATGAAGAGA TGAGTGTGTT CTAATAAGTC TCTGAAGCC AGTGGCTTA TGACTTTTAA 3000
 AAAAAATTAC AAACCAAGAA TTTTAAANG CAGAAGATGC TATTGTGGG GGTTTTCTC 3060
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 TCTACAGAGA AATAAATGT AATTAATCA AGTCCCTATT ATAGACTATT TGAAGCACAA 3240
 TTTATAGTGC AATAAATGT AATTAATCA AGTCCCTATT ATAGACTATT TGAAGCACAA 3300
 CCTAATGGA AATTGTAGAG ACCTTGCCTT AACATTATCT CCAGTAATT AAGTGTTCAT 3360
 GTGGTCTTG GAAACTGTTG TTTTCTGAA CATCTAAAGT GTGTAGACTG CATTCTTGCT 3420
 ATTATTTTAT TCTTGAATG TGACCTTTC ACTGTGCAA GGGAGATTTC TAGCCAGGCA 3480
 TTGACTATTA CAATTTCATT

Seq ID NO: 418 Protein sequence
 Protein Accession #: NP_004940.1

1 11 21 31 41 51
 MEAARPSGSS NGALCRLLLL TLAILIFASD ACKNVTILHP SKLDAEKLVG RVNLKECFIA 60
 ANLIHSSDDP FQILEDGSVY TINTILLSSE KRSFTILLSN TENQEKKKIF VFLEHQTKVL 120
 KRRTKEKVL RRAKRWAPI PCSMLENSLG PPLFLQVQV SDTAQNYTII YSIRGPGVDQ 180
 EPRNLFYVER DTANLYCTRP VDREQYSEPE IIAFAITPDG YTPLELPLI IKIEDENINY 240
 FIFTEFYTF TIFENCRVGT TVGQVCATDK DEPDTHMTRL KYSLIGQVFP SPTLFSMHFT 300
 TGVITTTSSQ LDRELIDKXQ LKIKVQMDQ QYFGLQTTST CIINIDVDND HLPTFTRTSY 360
 VTSVENIVD VELLRVTVED KDLVNTANWE ANYTILKNE NGNFKIVIDA KINBGVLCVV 420
 KPLMYEERQO MILQIGVNE APFSREASPR SAMSTATVTV NVEDQDEGPE CNPPIQTVM 480
 KENAEVGTIS NGKAYDPET RSSSGIRYKK LTDPTGWVTI DENTGSIKVF RSLDREASTI 540
 KNGIYNIIVL ASQGGGTCT GTLGILQDV NDNPPFIPKK TVIICKPTMS SAEIVAVDPD 600
 EPIHGPPDF SLESSTSEVR RMWRLKIND TAARLSYQND PPFSGYVVP I TVDRILGMSS 660
 VTSLDVTLCD CITENDCTHR VDPRIGGGV QLGEKAILAI LLGIALLPFI LFTLVCGASG 720
 TSKQPKVIBD DLAQNLIVS NTEAPGDDKV YSANGFTTQT VGASAQGVCG TVSGIKNGG 780
 QETIEMVKGQ HQTSESERGA GHHHTLDSR GGEDEVNCR YTYSENHST QERLGEESIR 840
 GHTLIEN

Seq ID NO: 419 DNA sequence
 Nucleic Acid Accession #: NM_002722.1
 Coding sequence: 14..301

1 11 21 31 41 51
 ACTCTGACT CCGGATGGCT GCGGCACGCC TCTGCTCTC CTTGCTGCTC CTGTCCACCT 60
 GCGTGGCTCT GTTACTACAG CCACTGCTGG GTGCCAGGG AGCCCACTG GAGCCAGTGT 120
 ACCGAGGGA CAATGCCACA CCAGAGCAGA TGGCCAGTA TGCAGCTGAT CTCCTAGAT 180
 ACATACAT GCTACACAGG CTAAGTATG GGAAGAACA CAAGAGGAC AGCTGGCTCT 240
 TCTCGAGTG GGGGTCCCG CATGCKGCTG TCCCCAGGA GCTCAGCCCG CTGGACTTAT 300
 AATGCCACT TCTGTCTCT ACGACTCCAT GAGCAGGCC AGCCCACTC TCCCTCTG 360
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 AAGCC

Seq ID NO: 420 Protein sequence
 Protein Accession #: NP_002713.1

1 11 21 31 41 51
 MAAARLCLSL LLLSTCVALL LQPLLGAQGA PLSPVVPQDM ATPQMAQYA ADLRRYINML 60
 TRPRYGRHK EPTLAFSENG SPHAAVPREL SPIDL

Seq ID NO: 421 DNA sequence
 Nucleic Acid Accession #: NM_032545.1
 Coding sequence: 46..718

1 11 21 31 41 51
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 CTATCAAGA GAGAAACATA ACGGCGGTAG AGAGGAGATC ACCAAGGTTG CCACTCAGAA 180
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 CGCGGGCGG CGCTGCTGCA GGAACGGCG TACCTGCGTG CTGGGAGCT TCTGCGTGTG 360
 CCGGCGCCAC TTCACCGGCC GCTACTGCGA GCATGACAG AGCGCGAGT AATCGGCGC 420
 CCGGAGCAC GGAGCCCTGA CCTCCGCGC CTGCCACCTC TGCAGGTGA TCTTCGGGGC 480
 CCTGCACGCT CTCCCTCTC AGACGCTGA CCGCTGTGAC CCGAAGACT TCTTGGCTC 540
 CCACGCTCAC GGGCGGAGG CGCGGGCGC GCGGAGCTG CTACTCTGCT TGCCTGCGC 600
 ACTCTGCGC GCGCTGCTC GCGGAGTGC GCGGCGCAC CCGGCTGCC TGGTCCCTC 660
 CGTCTCCAG CGGAGCGGC GCGGCTGCG AAGCGCGGA CTGGGCACT GCCTTTAATT 720
 TCTATGTTG TAAATAATAG ATGTGTTTAG TTTACGGTAA GCTGAAGCAC TGGGTGAATA 780

TTTTATTGG GTAATAAATA TTTTCATGAA AGCGCCAAAA AAAAAAAAAA AAAAAAAAAA 840
AAAAAA

Seq ID NO: 422 Protein sequence
Protein Accession #: NP_115934.1

1 11 21 31 41 51
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10 MTWRHVRLL FTVSLALQII NLGNSVQREK HNGGREEVTK VATQKHRQSP LNWTSRPFGE 60
VTGSAEGWGP EEPLPYSRF GEGASARPRC CINGGTCVLG SPCVCPAHFT GRVCEHDQRR 120
SECGALEHGA WTLRACHLCR CTFGALHCLP LQTPDRCDPK DFLASHARGP SAGGAPSLJLL 180
LIPCALLHRL LRPDAPAFPR SLVPSVLQRE RRPGRPGGLG HRL

Seq ID NO: 423 DNA sequence
Nucleic Acid Accession #: NM_006533.1
Coding sequence: 72..467

1 11 21 31 41 51
| | | | |
20 AGGGAGAGAG GGAGGGGAGG AAAATTGGAGA CCCAGCACC CCTTGCTCA CTCTCTTGCT 60
CACAGTCCAC GATGCCCCGG TCCCTGGTGT GCCTTGGTGT CATCATCTTG CTGTCTGCCT 120
TCTCCGACC TGGTGTCCAG GGTGGTCCCTA TGCCCAAGCT GGTGACCGG AAGCTGTGTG 180
CGGACCCAGG ATGCAGCCAC CCTATCTCCA TGCTGTGGC CCTCAGGAC TACATGGCCC 240
CGGACTCGCG ATTCTGACCC ATTCACCGGG GCCAAGTGGT GTATGTCTTC TCCAAGCTGA 300
25 AGGGCCGTGG GCGGCTCTTC TGGGGAGGCA GCGTTCAGGG AGATTACTAT GGAGATCTGG 360
CTGCTCGCCT GGGCTATTTC CCCAGTAGCA TTGTCCGAGA GGACCAGACC CTGAACCTG 420
GCAAGTCCA TGTGAAGACA GACAAATGGG ATTTCTACTG CCAGTGAGCT CAGCCTACCG 480
CTGGCCCTGC GCTTTCCTCT CCTTGGGTTT ATGCAATATC AATCAGCCCA GTGCAAAC

Seq ID NO: 424 Protein sequence
Protein Accession #: NP_006524.1

1 11 21 31 41 51
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35 MARSLVCLGV ILLLSAFSGP GVRGGEMPKL ADRKLCADQE CSHPISMAVA LDYMAPDCR 60
FLTIHRGQVV YVFSKLKGRG RLPWGGSVQG DYXEDLAARL GYPPSSIVRE DQTLKPGKVD 120
VKTDKMDFYC Q

Seq ID NO: 425 DNA sequence
Nucleic Acid Accession #: NM_080870.1
Coding sequence: 3..710

1 11 21 31 41 51
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45 AGATGACACA AGTCACAGAA AAGTCCACAG AACACCCAGA AAGAGCCACG TCAACCCACG 60
AGAAACCCAC AAGAACCCCA GAAAGCCCTA CGCTATACTC AGAGAAGACC ATATGCACCA 120
AAGGGAAGAA CACACCACTC CCAGAAAAGC CTACAGAAAA CCTGGGGAAC ACCCACCTGA 180
CCACTGAGAC CATAAAGACC CCAGTAAAGT CCACAGAAAA CCCAGAAAAA ACAGCAGCAG 240
TCACAAAGAC TATAAAACCT TCAGTCAAGG TCACAGGAGA CAAATCTCTC ACTACTACTC 300
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CATACCTCAA TAAAGATGGC TCACAGAAAG STATCCACGC TGGACAGATG GGAGAGAAATG 480
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TGTTCCTTGG CCTGATCTTC TTGGTCTCCT ATATGATGCG GACACGCCGC ACACTAACCC 600
55 AGAACACCCA GTACAAAGAT GCAGAGGATG AGGGTGGCCC CAATTCTTAC CCGGTCTACC 660
TGATGGAGCA GCAGAACTCT GGCATGGGCC AGATCCCTTC CCCACGGTGA TCTTGGAGTA 720
GGCGCCACGC CCTGCTCTCT CCGTCTCTCG CCGCTTCTCT GGATGAGGAA CCGACTCAC 780
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CTTCATCTGT TCTTGAACCT GGTGGGGGAA TGAGGTGATA AGCAAGGAGG GTGTAAGTTT 900
60 AGGGACACAA GAAGAAAGAA TGAATAATAC GAGCAGACAT TCTCTGTAGA AGGTAATGGT 960
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65 AGGACCCCTG CCCCCACCCC CATTTTITTA ATGAAAAAAA AAAACAAAAA AAACGGATCC 1260
AAGAAGAAAA GAGAAATTAT TTCTTCTTCC ACTCTCTCCA TGCCCTGGAG AAAAAAAGT 1320
CCGAAGAAAA TCATAAATAT CACTCATCTA CATGGTTGCT TCTCTTCTCT CCCAATCCC 1380
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70 GGACACGCAA GGAGGGGATG TTTATTTGGC CAGCAGTCTC ACCACTGAT CTCCACCCCA 1500
GACCTTCCCT GATTGGATTC TCAGCATTTA TTTTCTGTCT TCTTCCACCA AAAGCCAGCT 1560
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75 ATTTCTCTCT TCTCTCTT TGGCCATTTC ACCTTATTAC TGATTGGGTA GAGGGGGA 1740
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ATGT

Seq ID NO: 426 Protein sequence
Protein Accession #: NP_543146.1

1 11 21 31 41 51
| | | | |
80 MTQVTEKSTB HPEKTTSTTE KTRTPKPKPT LYSEKLTCTK GKNTVPVPEKP TENLGNITLT 60
TETIKAPVKS TENPKIAAV KTKIKPSVKV TGDKSLITTS SHLNKEVTH QVFTGSFTLI 120
TSRTKLSSIT SEATGNESEP YLNKDGSRQG IHAGQMGEND SPPAWAIVIV VLVAVILLIV 180

PLGLIFLVSY MMTRRLTLQ NTQYNDAEDE GGPNSYFVYL MEQQNLGMGQ IPSPR

Seq ID NO: 427 DNA sequence

Nucleic Acid Accession #: XM_069480.1

Coding sequence: 1..4383

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1 11 21 31 41 51

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TGA

Seq ID NO: 428 Protein sequence
Protein Accession #: XP_069480.1

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Seq ID NO: 429 DNA sequence
Nucleic Acid Accession #: FGENESH predicted
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Seq ID NO: 430 Protein sequence
 Protein Accession #: PGENESH predicted

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5 VTYRCNKGYT LAGDKESSCL ANSSWSHSPP VCEPVKCSST ENINNGKYIL SGLTYLSTAS 1920
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Seq ID NO: 431 DNA sequence
 Nucleic Acid Accession #: FGENESH predicted
 Coding sequence: 1..390

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 40 GAACCATGGC TGTGCCAGCC GGCACCCAGG TGTGGAGACA AGATCTACAA CCCTTGGAG 180
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Seq ID NO: 432 Protein sequence
 Protein Accession #: FGENESH predicted

50 1 11 21 31 41 51
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Seq ID NO: 433 DNA sequence
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 Protein Accession #: NP_009162.1

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 GIQEIIMNK SWVDINMFTC INGSBIYQPS QLPSEQYWNK VALQRSSGMN EKVIVVWYLA 240
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 SNFTKLKAE VMDAATQIF YLSLVAVGGL VALSSYNKFK NNCPSDAIV CLINCLTSVF 360
 AGFAIFSLG HMAHISKEIV SQVVKSGFDL AFIAYPEALA QLPGGPFWSI LFFFMLLTIG 420
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 CAGWGLIAA ILENVGIWI YGWRPIEDT EMMIGAKRMI FWLWWRACNF VITPILLIAI 540
 FWSLVQFHR FNYGAIYPD NGVALGWCM VFCIWIPIIM AIKIIQAKG NIFQRLISCC 600
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5 CCTTCACCTG TGAACCTGAG GTTCAGAACAA CAACCTACCT GTGGTGGGTA AATGGTCAGA 600
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 AATGTACAG TGGTCCCTTT CAGAGTTGGA CTCTAGACT CACTGTCTCT CACTCCCTGT 1680
 TTTAATTCAA CCGAGCCATG CAATGCCAAA TAATAGAATT GCTCCCTACC AGCTGAACAG 1740
 GGAGGAGTCT GTGCAGTTTC TGACACTTGT TGTGGAACAT GGCCTAATAC AATGGGTATC 1800
 GCTGAGACTA AGTTGTAGAA ATTAACAAAT GTGCTGCTTG GTTAAATGG CTACACTCAT 1860
 CTGACTCAT CTATTATCTA TTTAGTTGG TTGATCTCTT GCCTAAGGTG CGTAGTCCAA 1920
 CTCCTGGTAT TACCCTCCTA ATAGTCTATC TAGTAGTCAT ACTCCCTGGT GTAGTGTATT 1980
 CTCCTAAGAG TTTAAATGTC TGCAATGCAG CAGCCATCAA ATAGTGAATG GTCTCTCTTT 2040
 GGCTGGAATT ACNAAACTCA GAGAAATGTG TCATCAGGAG AACATCATAA CCCATGAAGG 2100
 ATAAAGAGCC CAAATGGTGG TAACGATAAA TAGCACTAAT GCCTTAAGAT TTGCTCACAC 2160
 TCTCACCTAG GTGAGGCGAT TGAGCCAGTG GTGCTAAATG CTACATACTC CAACTGAAAT 2220
 GTTAAGGAAG AAGTAGACTC CAATTAAAAA AAATTAAAAA CAAATTAAAAA AAAAAAAGA 2280
 ACACAGGAGA TTCCAGTCTA CTGAGTTAG CXTAATACAG AAGTCCCTTC TACTTTAACT 2340
 TTTACAAAAA AGTAACTCTA ACTAATCTGA TGTAAACCAA TGTATTATT TCTGTGGTTC 2400
 TGTTCCTTTG TTCCAATTTG ACAAAACCCA CTGTTCTTGT ATTGTATTGC CCAGGGGGAG 2460
 CTATCACTGT ACTGTAGAG TGGTGTCTGT TTAATTCATA AATCACAAAT AAAAGCCAA 2520
 TAGCTCTATA ACT

Seq ID NO: 436 Protein sequence
 Protein Accession #: AAA59907.1

40 1 11 21 31 41 51
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 NRIQSWYKQ ERVDGNSLIV GYVIGTQOAT PGPAYSGRET IYPNASLLIQ NVTQNDTGFY 120
 TLQVIKSDIV MEBEATGQFHV YPELKPSPIS SNNSNFVEDK DAVAFICEFE VQNTTYLWVW 180
 NQSLFVSPR LQLSNGNMTL TLLSVKRNDG GSYECIQNP ASANRSDPVT LNVLYGSDVP 240
 45 TISPSKANYR PGENLNLSCA AASNPPAQYS WFINGTFQQS TQELFIPNIT VMNSGSYMCO 300
 AHSNATGLNR TIVTMITVSG SAPVLSAVAT VGITIGVLAR VALI

Seq ID NO: 437 DNA sequence
 Nucleic Acid Accession #: M18728.1
 Coding sequence: 1355..1657

55 1 11 21 31 41 51
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 TTCTACACCT CTGGAACCCA CCCACCACTG CCAAGCTCAC TATTGAATCC ACGCCATCTA 180
 ATGTGACACT GGGGAGAGAG GTTCTCTTAC TCGCCACAAA CCGTCCCCAG AATCGTATTG 240
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 TAGGAATCTA ACAGACTTAC CCAGGGCCCG CATACAGTGG TCGAGAGACA ATATACCCCA 360
 60 ATGCATCCCT GCTGATCCAG AAGTCAACC AGAATGACAC AGGATTCTAT ACCCTACBAG 420
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 TGCCCAAGCC CTCATCTCC AGCAACAAC CCAACCCCTG GGAGGACAGG GATGCTGTGG 540
 CCTTCACTGT TGAACCTBAG GTTCAGAA CAACCTACCT GTGGTGGGTA AATGGTCAGA 600
 GCTTCCCGGT CAGTCCCAAG CTGCAGCTGT CCAATGGCAA CATGACCCCT ACTCTACTCA 660
 65 GCGTCAAAAG GAACGATGCA GGTCTCTATG AATGTGAAT ACAGAACCCA GCGAGTGCCA 720
 ACCGCAAGTG CCCAGTCACC CTGAATGTCC TCTATGGCCC AGATGTCCCC ACCATTTCCT 780
 CCTCAAAAGC CAATTACCGT CCAGGGGAAA ATCTGACCT CTCTTGCCAC GCAGCCTCTA 840
 ACCCACTCTG ACAGTACTCT TGGTTTATCA ATGGGACGTT CCAGCAATCC ACACAGAGGC 900
 70 TCTTTATCCC CACTATCACT GTGAATAATA GCGGATCCTA TATGTGCCAA GCCATAACT 960
 CAGCCACTGG CTTCAATAGG ACCACAGTCA CGATGATCAC AGTCTCTGGA AGTGCTCCTG 1020
 TCTCTCAGC TGTGGCCACC GTCGGCATCA CGATTGGAGT GCTGGCCAGG GTGGCTCTGA 1080
 TATAGCAGCC CTGGTGTATT TTCGATATTT CAGGAAGACT GGCAGATTGG ACCAGACCCCT 1140
 GAATTTCTCT AGCTCCTCCA ATCCCATTTT ATCCCATGGA ACCACTAAAA ACAAGGTCTG 1200
 CTCCTGCTCT GAAGCCCTAT ATGCTGGAGA TGGACAATC AATGAAAATT TAAAGGGAAA 1260
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 GCTGAGACTA AGTTGTAGAA ATTAACAAAT GTGCTGCTTG GTTAAATGG CTACACTCAT 1860

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CTGACTCATT CTTTATCTTA TTTTAGTGGG TTTGTATCTT GCCTAAGGTG CGTAGTCCAA 1920
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CTCTAAAGGC TTTAAATGTC TGCAATGCAGC CAGCCATCAA ATAGTGAATG GTCTCTCTTT 2040
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GTTAAGGAAG AAGATAGATC CAATTAAAAA AAATTAAAAA CAATTTAAAA AAAAAAAGA 2280
ACACAGGAGA TTCCAGTCTA CTTGAGTTAG CATAATACAG AAGTCCCCTC TACTTTAATC 2340
TTTACAAAAA AGTAACCTGA ACTAATCTGA TGTAAACCAA TGTATTATT TCTGTGGTTC 2400
TGTTTCCTTG TTCCAATTG ACAAACCCA CTGTTCTTGT ATTGTATTGC CCAGGGGGAG 2460
CTATCACTGT ACTTGTAGAG TGGTGCTGCT TTAATTCATA AATCACAAT AAAAGCCAAT 2520
TAGCTCTATA ACT

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Seq ID NO: 438 Protein sequence
Protein Accession #: AAA59908.1

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MDSFSQDVKT RLLIMIRLLP PFNLSLIMPA SFANQDDAVI SISQEVASEG NLTECQIYLV 60
NPNVLHKIRD PLVHPVTDIS SIFNTAVCSN VQNSFSELDL

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Seq ID NO: 439 DNA sequence
Nucleic Acid Accession #: M18728.1
Coding sequence: 2370..2501

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CTCAGCCTCC TCCTGCGAGA TTGCATGTTC CCTGGAAGGA GGTCTGCTC ACAGCCTCAC 120
TTCTAACTCT CTGGAACCCA CCCACCACCTG CCAAGCTCAC TATTGAATCC ACGCATTCA 180
ATGTGCGAGA GGGGAAGGAG GTTCTCTTAC TCGCCACAA CCTGCCCGAG AATCGTATTG 240
GTTACAGCTG GTACAAAGGC GAAAGAGTGG ATGGCAACAG TCTAATTGTA GGATATGTAA 300
TAGGAATCTA ACAAGCTACC CCAGGCCCCG CATAAGTGG TCGAGAGACA ATATACCCCA 360
ATGCATCCCT GCTGATCCAG AACGTCACCC AGAATGACAC AGGATCTTAT ACCCTACAAG 420
TCATAAAGTC AGATCTTGTG AATGAAGAAO CAACCGGACA GTTCCATGTA TACCGGAGC 480
TGCCCAAGCC CTCCATCTCC AGCAACAAC CTCAACCCGT GGAGGACAAG GATGCTGTGG 540
CCTTCACTTG TGAACCTGAG GTTCAGAAC CAACCTACCT GTGGTGGGTA AATGGTCAGA 600
GCCTCCCGGT CAGTCCCAGS CTGCACTGT CCAATGGCAA CTGACCCCTC ACTCTACTCA 660
GCCTCAAAAG GAACGATGCA GGATCCTATG AATGTGAAT ACAGAACCA GCGAGTGCCA 720
ACCGCAGTGA CCCAGTCACC CTGAATGTCC TCTATGGCCC AGATGTCCCC ACCATTTCCT 780
CCTCAAAGGC CAATTAACCT CCAGGGGAAA ATCTGAACCT CTCTGCCAC GCAGCCTCTA 840
ACCCACTCTG ACAGTACTCT TGGTTTATCA ATGGGACGTT CCAGCAATCC ACACAAGAGC 900
TCTTTATCCC CAACATCACT GTGAATAATA GCGGATCCTA TATGTGCCAA GCCCATAACT 960
CAGCCACTGG CTTCAATAGG ACCACAGTCA CGATGATCAC AGTCTCTGGA AGTGTCTACT 1020
TCCTCTCAGC TGTGGCCACC GTCCGCATCA CGATTGGAGT GCTGGCCAGG GTGGCTCTGA 1080
TATAGCAGCC CTGGTGTATT TTGATATTT CAGGAAGACT GGCAGATTGG ACCAGACCT 1140
GAATTCCTCT AGCTCCCTCA ATCCCATTTT ATCCCATGGA ACCACTAAAA ACAAGGTCTG 1200
CTCTGCTCCT GAAGCCCTAT ATGCTGGAGA TGGACAACTC AATGAAAAAT TAAAGGGAAA 1260
ACCTCTCAGG CTGAGGTGTG TGCCACTCAG AGACTTCACC TAACTAGAGR CAGTCAAACT 1320
GCAAAACCATG GTGAGAAATT GACGACTCA CACTATGGAC AGCTTTTCCC AAGATGTCAA 1380
AACAAAGACTC CTCATCATGA TAAGGCTCTT ACCCCCTTTT AATTTGTCTT TGTCTATGCC 1440
TGCCCTCTTC ACAGTCTCAG ATGATGCTGT CATTAGTATT TCACAAGAAG TAGCTTCAGA 1500
GGGTAACTTA ACAGAGTGTG AGATCTATCT TGTCAATCCC AACGTTTAC ATAAATAAGA 1560
AGATCCCTTA GTGACCCAGG TGACTGACAT TAGCAGCATC TTTAACACAG CCGTGTGTTT 1620
AAATGTACAG TGGTCTTTT CAGAGTGGGA CTCTAGACT CACCTGTTCT CACTCCCTGT 1680
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GCTGAGACTA AGTGTAGAA ATTAACAAAT GTGCTGCTTG GTTAAATGG CTACACTCAT 1860
CTGACTCATT CTTTATCTA TTTAGTTGG TTTGTATCTT GCCTAAGGTG CGTAGTCCAA 1920
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CTCTAAAGGC TTTAAATGTC TGCAATGCAGC CAGCCATCAA ATAGTGAATG GTCTCTCTTT 2040
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TCTCACCTAG GTGAGCCCAT TGAGCCAGTG GTGCTAAATG CTACATACTC CAACTGAAAT 2220
GTTAAGGAAG AAGATAGATC CAATTAAAAA AAATTAAAAA CAATTTAAAA AAAAAAAGA 2280
ACACAGGAGA TTCCAGTCTA CTTGAGTTAG CATAATACAG AAGTCCCCTC TACTTTAATC 2340
TTTACAAAAA AGTAACCTGA ACTAATCTGA TGTAAACCAA TGTATTATT TCTGTGGTTC 2400
TGTTTCCTTG TTCCAATTG ACAAACCCA CTGTTCTTGT ATTGTATTGC CCAGGGGGAG 2460
CTATCACTGT ACTTGTAGAG TGGTGCTGCT TTAATTCATA AATCACAAT AAAAGCCAAT 2520
TAGCTCTATA ACT

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Seq ID NO: 440 Protein sequence
Protein Accession #: AAA59909.1

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Seq ID NO: 441 DNA sequence
Nucleic Acid Accession #: NM_002381.2
Coding sequence: 64..1524

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	ACCATGCCGC	GCCCGGCCCC	CGCGCGCCGC	CTCCCGGGAC	TCTCTCTGCT	GCTCTGGCCG	120
5	CTGCTGCTGC	TGCCCCGCCG	CGCCCCCGAC	CCCGTGGCCC	GCCCGGGCTT	CGGAGGCTCG	180
	GAGACCCGAG	GTCCCCGGGG	CAGCCCTGGA	CGCCGCCCTT	CTCCTGCGGC	TCCCGACGGC	240
	GCGCCCGCTT	CCGGGACTAG	CGAGCCTGGC	CGCGCCCGCG	GTGCAAGTGT	TTGCAAGAGC	300
	AGACCCCTTG	ACCTGGTGT	TATCATATGAT	AGTTCTCGTA	GGTACCGGCC	CCTGGAATTC	360
	ACCAAAGTGA	AAACTTTTGT	CTCCCGGATA	ATCGACACTC	TGGACATTGG	GCCAGCCGAC	420
	ACGCGGGTGG	CAGTGGTGAA	CTATGCTAGC	ACTGTGAAGA	TCGAGTTCCA	ACTCCAGGCC	480
10	TACACAGATA	AGCAGTCCCT	GAAGCAGGCT	GTGGGTGAAA	TCACACCCCT	GTCAACAGGC	540
	ACCATGTTCAG	GCCTAGCCAT	CCAGACAGCA	ATGGAAGAAG	CCTTCACAGT	GGAGGCGAGG	600
	GCTCGAGAGC	CCTCTTCTAA	CATCCCTAAG	GTGGCCATCA	TTGTTACAGA	TGGGAGGCCG	660
	CAGGACCAAG	TGAATGAAGT	GGCGGCTCGG	GCCCAAGCAT	CTGGTATTGA	GCTCTATGCT	720
	GTGGGCGTGG	ACCGGCGAGA	CATGGCGTCC	CTCAAGATGA	TGGCCAGTGA	GCCCCAGAG	780
15	GAGCATGTTT	TCTACGTGGA	GACCTATGGG	GTCAATTGAGA	AACTTTCCTC	TAGATTCCAG	840
	GAAACCTTCT	GTGCGCTGGA	CCCCGTGTGG	CTTGGAAACAC	ACCAGTGCCA	GCACGCTGCG	900
	ATCAGTGAATG	GGGAAGCCAA	GCACCACTGT	CAGTGTAGCC	AAGGATACAC	CTTGAATGCC	960
	GACAGAAAAA	CGGTGTCAGC	TCTTGATAGG	TGTGCTCTTA	ACACCCACGG	ATGTGAGCAC	1020
	ATCTGTGTGA	TAACTGAGAG	TGGCTCTTAT	CATTGTGAGT	GCTATGAAGG	TTATACCTTG	1080
20	AATGAAGACA	GGAAAACTTG	TTCAGCTCAA	GATAAATGTG	CTTTGGGTAC	CCATGGGTGT	1140
	CAGCACATTT	GTGTGATAGA	CAGAACAGGG	TCCCATCATT	GTGAATGCTA	TGAGGGCTAC	1200
	ACTCTGAATG	CAGATAAAAA	AACATGTTCA	GTCCGTGACA	AGTGTGCCCT	AGGCTCTCAT	1260
	GGTTCGCCAGC	ACATTTGTGT	GAGTGATGGG	CGCGCATCCT	ACCACGTGTA	TGCTATCTCT	1320
25	GGCTACACCT	TAAATGAGGA	CAAGAAAAACA	TGTTCAAGCCA	CTGAGGAGGC	ACGAAGACTT	1380
	GTTTCCACTG	AAGATGCTTG	TGGATGTGAA	GCTACACTGG	CATTCCAGGA	CAAGGTACGC	1440
	TGCTATCTTC	AAGAGCTGAA	CACATAACTT	GATGACATTT	TGGAGAGATT	GAATAAAT	1500
	GAAATAGTAC	AAATACATCG	TTAAATTTGCT	CCAATTTCTC	ACCTGAAAAA	GTGGACAGCT	1560
	TGGTGACTAT	AAATACATCG	CATTCTTTTG	CACACCTGTT	ATGCGCAATG	TTCTGCTAAT	1620
30	TAATTTGCCA	TATCTGTAT	TAATGCTTGA	ATATTACTGG	ATAAATTGTA	TGAAGATCTT	1680
	CTGCAGATTC	AGCATGATTT	TTCCAAGGAA	ATACATATGC	AGATACCTAT	TAAAGACAAA	1740
	CTTTAGTGTG	TCTAAGTTAT	GACTGTGAAA	TGATGTGGAG	GAATAGAAAT	GAATAAGTTA	1800
	GTGTTCTTCT	ATCTACTAAT	TGAGCCATTT	AATTTTAAAT	TGTTTATATT	AGATAACCAT	1860
	ATTCACAATG	GAAACTTTAG	GTCTAGTTTC	TTTTGATAGT	ATTTATAATA	TAAATCAATC	1920
35	TTATTACTGA	GAGTGCAAAT	TGTACAAGGT	ATTTACACAT	ACAACTTCAT	ATAACTGAGA	1980
	TGAATGTAAAT	TTTGAAGTGT	TTAACACTTT	TTGTTTTTTG	CTTATTTTGT	TGGAGTATTA	2040
	TTGAAGATGT	GATCAATAGA	TTGTAATACA	CATATCTAAA	AATAGTTAAC	ACAGATCAAG	2100
	TGAACATTAC	ATTGCCATTT	TTAATTCATT	CTGGTCTTTG	AAAGAAATGT	ACTACTAAGG	2160
	AGCACAATGT	GTGAATTTAG	GGTGTAAAC	TTTTTACCAA	GTACAAAAT	CCCAATTTCA	2220
40	CTTTATTATT	TGCTCTCAGG	ATCCAAGTGA	CANAATATA	TATTTATATA	ATTGCTATAA	2280
	ATCGACAAAA	TCTAATGTTG	TCTTTTAAAT	GTTAGTGATC	ACCCTGCTTC	AGCCTCCCAA	2340
	AGTGTCTGGA	TACAGGCTT	GAAAGTCTAA	CTTTTPTTAA	CTTATATATT	TGATACATAT	2400
	AATTTCTTTG	GTCTTGAAAC	TTGCAACTTT	CAGAACAAAA	CAGTCCCTTA	AATTTTGCAAT	2460
	TGCTCAATTC	TGTTTTTCGT	TTGCATGTTC	TTAATATAA	TAAAAGTTAT	TACCTTTACA	2520
45	TATTATCATG	TCTATTTTTG	ATGACTCATC	AATTTTGCTC	ATTAAAGATA	TTTCTTTAAA	2580
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Seq ID NO: 442 Protein sequence
Protein Accession #: NP_02372.1

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	PASGTSEPRR	ARGAGVCKSR	PLDLVFLIDS	SRSVRLPFT	KVKTFFVSRII	DTLDIGEDAT	120
	RVAVVNYAST	VKIEFQLQAY	TDKQSLKQAV	GRITFLSTGT	MSGLAIQTAM	DEAPTFVAGA	180
55	REPSSMIPKV	AIIVTDGRFQ	DOVNEVAARA	QASGIELYAV	GVDRADMASL	KMMASEPLBE	240
	HVFYVETYG	IEKLSSRFQE	TFCALDPCVL	ETHGQCHVCI	SDGEGKHCEB	CSQGYTLNAD	300
	KRTCHALDRC	ALNTHGCEHI	CVNDKSGSVH	CECYEGYTLN	EDRKTCSAQT	KCALGTHGCG	360
	HLNVNDRITG	HHCECYBYT	LNADKKTCSV	EDKCALGSEB	QCHICVSDGA	ASYHCDCTPG	420
60	YTLNEDDKTC	SATBEARRLV	STEDACGCEA	TLAPQDKVSS	YLQRLNTRLD	DILERLKINE	480
	YQGIHR						

Seq ID NO: 443 DNA sequence
Nucleic Acid Accession #: NM_016639.1
Coding sequence: 40..429

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	CGGTTGCTGC	GGCTCCTCCT	GCNGGGGCTC	TGGCTGGCGT	TGCTGCGCTC	CGTGGCGGGG	120
70	GAGCAAGCGC	CAGGACCGCG	CCCCGTCTCC	CGCGGCGAGT	CCTGGAGCGC	GGACCTGGAC	180
	AAGTGCAATG	ACTGCGCGTC	TTGCAGGGCG	CGACCGCACA	GCGACTTCTG	CTTGGGCTGC	240
	GCTGCAGCAC	CTCCGTGCCC	CTTCGGGCTG	CTTTGGCCCC	TCTTGGGGGG	CGCTCTGAGC	300
	CTGACCTTGG	TGCTGGGGCT	GCTTTCTGCG	TTTTTGGTCT	GGAGACGATG	CGCGAGGAGA	360
	GAGAAGTTCA	CCACGCCCAT	AGAGGAGACC	GGCGGAGAGG	GCTGCCCGAG	TGTGGCGCTG	420
75	ATCCAGTGAC	AATGTGCCCC	CTGCCAGCGG	GGGCTCGCCC	ACTCATCATT	CATTTCATCA	480
	TTCTAGAGCC	AGTCTCTGCC	TCCGACAGCG	GGCGGGAGCC	AAGCTCCTCC	AACCACAAGG	540
	GGGGTGGGGG	GCGGTGAATC	ACCTCTGAGG	CCTGGGCCCA	GGGTTCAGGG	GAACCTTCCA	600
	AGGTGTCTGG	TTGCCCTGCC	TCTGGCTCCA	GAACAGAAAG	GGAGCCTCAC	GCTGGCTCAC	660
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	CCTTCTCTAG	GACCTGGGGG	CCAGGCTGAC	TTGGGGGGCA	GACTTGACAC	TAGGCCCCAC	780
	TCACCTCAGT	GCTCTGAAAT	TCCACCAAGG	GGGTCAACCT	GGGGGGTTAG	GGACCTTATT	840
	TTAACACTAG	GGGCTGAGCC	ACTAGGAGGG	CTGGCCCTAA	GATACAGACC	CCCCCAACTC	900
	CCCAAGAGCG	GGAGAGAGATA	TTTATTTTGG	GGAGGTTTGG	GAGGGGAGGG	AGATTATTAT	960

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Seq ID NO: 444 Protein sequence
Protein Accession #: NP_057723.1

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SDFCLGCAAA	PPAPFRLLP	ILGGALSLTF	VLGLLSGFLV	WRRRCRRREKF	TTPIKETGGE	120
GCPAVALIQ						

Seq ID NO: 445 DNA sequence
Nucleic Acid Accession #: AF322916.1
Coding sequence: 50..4300

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CAGCGCCGAT	CGAGCAGATT	GGAATAAATA	TGATGAOCGA	TTGATGAAAG	CAGCAGAAAG	180
GGGGGATGTA	GAATAAGTGA	CCTCAATCCT	TGCTAAAAAG	GGGGTCAATC	CAGGCAAACT	240
AGATGTGGAA	GGCAGATCTG	TCTTCCATGT	TGTGACCTCA	AAGGGGAATC	TTGAGTGTIT	300
GAATGCCATC	CTTATACATG	GAGTTGATAT	TACAAACAGT	GACACTGCAG	GGAGAAATGC	360
TCTTCACCTG	GCTGCTAAGT	ATGGACATGC	ATTGTGCTTA	CAAAAACTTC	TACAGTACAA	420
TTGTCCCACT	GAGCATGCGC	ACCTGCGAGG	AAGAACTGCA	CTTCAAAAAA	AAGCAATGCG	480
CAATCTGGAC	TCTAGCATAC	AGCTGCTTTG	TGACCATGGG	GCCTCTGTGA	ATGCCAAAGA	540
TGTAAGAAGG	CGGACACCAC	TTGTTCTGGC	TACTCAGATG	AGTAGGCCAA	CAATATGTCA	600
ACTGCTGATA	GATAGAGGAG	CGGATGTTAA	TTCCAGAGAC	AAACAAAACA	GAACTGCCCT	660
CATGCTAGGT	TGCAGATATG	GTTCAGAGAG	TGCAGTAGAA	GTCTTAATTA	AAAAATGGTG	720
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CAATCTGGAC	ATTCTAACCT	TGTTGAAGAC	TGCATCGGAA	AAATACCAACA	AAGGAGAGAG	840
ACTTTGGTAG	GAAGGACCAT	CTTTGCAACA	GCGAAATTGT	ACACACATGC	AAGATGAAGT	900
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GAGAGAAAAG	CTGAAGTCCC	TTTTGGCAGC	TAAAGAAAAG	CAACATGAAG	AAAGCTTAAG	1140
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AGACTCACAG	TGTACTTCCC	CAGGTATACC	AGCCCATATG	CAAGGCAGAT	CTATGTTAAG	1320
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AGAGTTAGAA	GCAATGCGAA	CTTTCTGTGA	GTCCAGCAAA	CAAGACCCAC	TGAAGCTOCA	1440
AAATGAAAGT	GCAACACAAG	TGGCAGATG	CRAAGCTTTA	GCAATTGAAT	GTGAAGGGGT	1500
CAAGGAGGAT	TCAGATGAAC	AGATAAGCA	ATTAGAAGAT	GCAATTAAAG	ATGTGCAGAA	1560
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AGAACACTTA	CAAGCTGAAG	CAGCCTCAGG	GAATCACAGA	CTAACCGAGG	AACTGAAGGA	1680
TCAGTTGAAA	GACTTGAAG	TAAATATGA	AGGTGCTTCA	GCAAGAGTGG	GGAAATTAAG	1740
AAACCAAGT	AAAGCAAAAT	AGATGATAGT	AGAAGAGITT	AAGAGGGATG	AAGGCCAAGT	1800
GATAGAGGAA	AAATAGCGAT	TACAGAAAGG	ACTTAGTATG	TGTGAATATG	AGCGAGAGAA	1860
GAAGAGGAGA	AAGGTTCACG	AGATGGAAAG	CCAGGCCAAA	GAATTGTGAG	CGAAGTTGGC	1920
CCTTTCCATT	CCAGCTGAAA	AAATTGAATA	CATGAAGAGC	TCATTATCAA	ATGAAGTGAA	1980
TGAGAAAGCA	AAAAAATAG	TAGAAATGGA	AAGAGAACAT	GAATAATCAC	TTAGTGAAAT	2040
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GATCACTGAG	TTAATATTGA	AAATCAGAC	ACTACAAAG	GAAATTGAAA	AAGTTTATTT	2220
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TGTTCTTTTA	AAAGTAAAGT	AAGACATGAA	AAAGTCACAT	GATGCAATTA	TTGATGATCT	2340
TAAATAGAGT	CTTTTAGATG	TAAACAAAA	ATATACAGAA	AAGAAGTTGG	AAATGGAGAA	2400
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TCGGACACAC CTTCTTAGTG CTGCACAGGG TCACATGGAT GAAGATGTTT AGGAGGCTCT 4260
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10 Seq ID NO: 446 Protein sequence
Protein Accession #: AAG49577.1

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SMRPLFELS PLQTSYSENE ILKKELEAMR TFCESAKQDR LKLQNELAHK VAECALALE 480
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KVYLDNKLK EAHNLATTEM KNYVPLKVS EDMKKSHDAI IDMLNRKLLD VTQKYTEKCL 780
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EVRNVKELV ENAKGTSEI LAVQNLLQKQ HVPLEQVEAL EKSLEGTIEN LKEELKSMQR 1140
CYEKQQTIVT KIQQLLENQK NSSVPLAEHL QIKAEFEKEV GIKASLREK EESQNMKEE 1200
VSKLQSEVQN TKQALKKLET REVVDLSKYK ATKSDLETQI SSLNEKLANL NRKYEEVCBE 1260
VLHAKKEIS AKDEKELLHF STEQIKDQK ERCDKSLTTI TELQRRIQES AKQIEAKDNK 1320
ITELNDIVER LKQALNGLSQ LTYTSGNPTK RQSQLIDTLQ HQVKSLEQQL ADADRQHQEV 1380
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40 Seq ID NO: 447 DNA sequence
Nucleic Acid Accession #: NM_003020.1
Coding sequence: 29..664

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TTTGATTTTG ATTAGTGTAG TCATCCAGCC CTTGGGCATT GTTATACACC AGTAAAGAAG 1080
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GCAAGCATTG GC

70 Seq ID NO: 448 Protein sequence
Protein Accession #: NP_003011.1

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80 Seq ID NO: 449 DNA sequence
Nucleic Acid Accession #: NM_003816.1
Coding sequence: 79..2538

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Seq ID NO: 450 Protein sequence
 Protein Accession #: NP_003807.1

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 DIEKETAKDE EEEPPMTQL LRRRAVLEQ TRYVELPIVV DKERYDMGR NQTAVREMI 240
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 75 AQLVLKKGFG GTAGMAPVGT VCSRHAGGI NVFGQITVET FASIVAHLEH HNLQNMHDG 360
 RDCSCGAKSC IMNSGAGSR NFSSCSAEDF EKLTINKGNN CLNINPKPDE AYSAPSCGNK 420
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Seq ID NO: 451 DNA sequence
Nucleic Acid Accession #: NM_016650.1
Coding sequence: 196..789

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Seq ID NO: 452 Protein sequence
Protein Accession #: NP_057734.1

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Seq ID NO: 453 DNA sequence
Nucleic Acid Accession #: NM_002091.1
Coding sequence: 56..503

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Seq ID NO: 454 Protein sequence
Protein Accession #: NP_002082.1

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Seq ID NO: 455 DNA sequence
Nucleic Acid Accession #: NM_016522.1
Coding sequence: 265..1299

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AGCGGAGATG  CCACTTCTCC  CAAAGCTATG  GACACGTA  CGGTCCGGCA  GGGGGAGAGC  420
GCCACCTCA  GGTGACATAT  TGACACCGG  GTCAACCGG  TGCGCTGGCT  AAACCGCAGC  480
ACCTCTCTCT  ATGCTGGGAA  TGACAGTGG  TGCTGGATC  CTCGCTGGT  CCTTCTGAGC  540
AACACCCAAA  CGCAGTACAG  CATCGAGATC  CAGAAGCTGG  ATGTGTATGA  CGAGGGCCCT  600
TACACTGCT  CGGTGCAGAC  AGACACCCAC  CCAAGACCT  CTAGGGTCCA  CCTCATTTG  660
CAGTATCTC  CCAAAATGT  AGAGATTCT  TCAGATATCT  CCAATTAATGA  AGGGAACAAT  720
ATTAGCCCA  CCGCATAGC  AACTGGTAGA  CAGAGCCCTA  CGGTACTTG  GAGACATC  780

```

TCTCCAAAG CGGTGGCTT TGTGAGTGAA GACGAATACT TGGAATTC A GGGCATCACC 840
 CGGGAACAGT CAGGGGACTA CGAGTGCAGT GCCTCCAATG ACGTGGCCGC GCCCGTGGTA 900
 CGGAGAGTAA AGGTACACGT GAACTATCCA CCAATACATT CAGAAGCCAA GGGTACAGGT 960
 GTCCCCGTGG GACAAAAGGG GACACTGCAG TGTGAAGCCT CAGCAGTCCC CTCAGCAGAA 1020
 TTCCAGTGGT ACAAGGATGA CAAAAGACTG ATTGAAGGAA AGAAAGGGGT GAAAGTGGAA 1080
 AACAGACCTT TCCTCTCAAA ACTCATCTTC TTCAATGTCT CTGAACATGA CTATGGGAAC 1140
 TACACTTGGG TGGCCTCCAA CAAGCTGGGC CACACCAATG CCAGCATCAT GCTATTTGGT 1200
 CCAGGCGCGG TCAGCGAGGT GAGCAACGAC ACGTCGAGGA GGGCAGGCTG CGTCTGGCTG 1260
 CTGCCCTCTC TGGTCTTGCA CCTGCTTCTC AAATTTTGGT GTGAGTGCCA CTTOCCCAAC 1320
 CGGGAAAGGC TGCCGCCACC ACCACCACCA ACACACAGC AATGGCAACA CCGACAGCAA 1380
 CCAATCAGAT ATATACCAAT GAAATTAGAA GAAACACAGC CTCATGGGAC AGAAATTGTA 1440
 GGGAGGGGAA CAAAGAATAC TTTGGGGGGA AAGAGTTTIT AAAAAAGAAA TGTAAATTG 1500
 CCTTGCAGAT ATTTAGGTAT AATGGAGTTT TCTTTTCCCA AACGGGAAGA ACACAGCACA 1560
 CCGGCTTGG ACCCACTGCA AGCTGCATCG TGCAACCTCT TTGGTCCGAG TGTGGGCAAG 1620
 GGCTCAGCGT TGCTGCTCAC AGACTGCCCC CAGCTGGAAC ATTCTGGAGC TGGCCATCCC 1680
 AAATTCATC AGTCCATAG GACGAACAGA ATGAGACTTT CCGGCCCAAG CGTGGCGCTT 1740
 CGGGCCCAAG CGTGGCGCTG CGGGCACTTT GGTAGACTGT GCCACCACGG CGTGTGTGT 1800
 GAACGTGAA ATAAAAAGAG CAAAAAAGAA AAAAAA

Seq ID NO: 456 Protein sequence
 Protein Accession #: NP_057606.1

1 11 21 31 41 51
 MGVCGLFLP NKCLVVLRL LFLVPTGVP VRSGDATFPK AMDNVIVRQG ESATLRCTID 60
 NRVRVANLNL RTILYAGND KNCLEPRVVL LSNITQYSI EIQNVIVYDE GPYTCVQTD 120
 NHPKTSRVHL IVQVSPKIVE IBEDISINEG NNISLTCTAT GRPEPTVTHR HSPKAVGFV 180
 SEDFYLIQIG ITRERQSDYB CSASNDVAAP VVRVKVTVN YPFYISEAKG TGVFVGQKGT 240
 LQCBASAVPS AEFQWYKDDK RLIEGKXGVK VERNRPFSLK IFFNVSEHDY GNYTCVASNK 300
 LGHTNASIML PEGAVSEVS NGTSRRAGCV WLLPLVLHL LLKF

Seq ID NO: 457 DNA sequence
 Nucleic Acid Accession #: NM_012261.1
 Coding sequence: 203..1045

1 11 21 31 41 51
 GATTTCCTCT GCCAGCAGCT GTCCGTGCGG CGCTCGACAC CGAGTCTCTAG CTAGGCGCTC 60
 ACAGAAATACG CGCTCCCTCC CTCCTCCCTTC TCTGTCCCCC GCTCTCTGCT CACCCCGGCC 120
 CACTCCAGGG GCGACTTTGA GGGATTCCTT CTCTGGCGGC CTCTGCAGCA GCACAGCCGG 180
 CCTCATTCGG GGCCTCTGGA GTATGGATCT CCAAGGAAGA GGGGTCCCA GCATGACAG 240
 ACTTCAGATT CTCTCTGATG TGTTCCTATC AATGGCTCAA ATCATGGCAG AACAGAAAT 300
 GGAAATATCT CTAGGCCCTT CCACTAACCC TGAATAAGAT ATATTGTGG TGGGGGAAA 360
 TGGGACGACG TGCTCTCATG CAGAGTTTGC AGCCAAATTT ATTGTACCTT ATGATGTGTG 420
 GGCCAGCAAC TACATAGATC TGATCACAGA ACAGGCCGAT ATCGCATIGA CCGGGGAGC 480
 TGAGGTGAAG GGCGCTGTGT GCCACAGCCA GTCCGAGCTG CAAGTGTCTT GGTGGATCG 540
 CGCATATGCA CTCAAAATGC TCTTTGTAAA GGAAAGCCAC AACATGTCCA AGGGACCTGA 600
 GGGGACTTGG AGGCTGAGCA AAGTGCAGTT TGTCTACGAC TCCTCGGAGA AAACCTACTT 660
 CAAAGACGCA GTCACTGCTG GGAAGCACAC AGCCAACTCG CACCACCTCT CTGCTTGGT 720
 CACCCCGCGT GCGAATTCCT ATGAGTGTCA AGCTCAACAA ACCATTTCAC TGGCCTCTAG 780
 TGATCGGCGA AAGAGCTTCA CCATGATCTT GTCTGCGGTC CACATCCAAC CTTTGTACAT 840
 TATCTCAGAT TTTGTCTTCA GTGAAGAGCA TAAATGCCCA GTGGATGAGC GGGAGCACT 900
 GGAAGAAACC TTGCCCTCTG TTTTGGGGCT CATCTTGGGC CTGCTCATCA TGTAAACACT 960
 CGCGATTAC CACGTCCACC ACAAAATGAC TGCCAAACAG GTGCAGATCC CTGGGACAG 1020
 ATCCAGATAT AAGCAGATGG GCTAGAGGCC GTTAGGCAGG CACCCCTAT TCTGTCTCCC 1080
 CCAACTGGAT CAGGTAGAAC AACAAAAGCA CTTTCCATC TTGTACAGCA GATACACCAA 1140
 CATAGCTACA ATCAACAGG CCGTGGTATC TGAGGCTTGC TTGGCTTGTG TCATGCTTA 1200
 AATCCACGGA AGGGGGAGAC TCTTTCGGAT TTGTAGGGTG AAATGGCAAT TATCTCTCC 1260
 ATGCTGGGGA GAGGGGGAGG AGGCTCTCAG ACAGCTTTCG TGCTCATGGT GGTCTGCTT 1320
 TGACTCTCCA AAGAGCAATA AATGCCACTT GAGCTGTAT CTGGCCCAA AGTTTAGGGA 1380
 TTGAAACAT GCTTCTTTGA GAGGAAACCC CCTTAGGTT CAGAAGATA TGGGGTGGT 1440
 TGCTCCCTTG GACACAGCTG GCTTATCTTA TACAGTTGTC AATGCACACA GAATACACC 1500
 TCATGCTCCC TGCAAGAGA CCCCTGAAAG TGATTCATGC TTCTGGCTGG CATCTGCAT 1560
 GTTTAGTGAT TGTCTTGGGA ATGTTTCACT GCTACCGCA TCCAGCGACT GCAGCACCAG 1620
 AAAACGACTA ATGTAACTAT GCAGAGTGT TTGGACTTCT TCCTGTGCCA GGTCCAAGTC 1680
 GGGGACCTG AAGAATCAAT CTGTGTGAGT CAGTTTTTCA AATGAAATA AAACACACTA 1740
 TTCTCTGGC

Seq ID NO: 458 Protein sequence
 Protein Accession #: NP_036393.1

1 11 21 31 41 51
 MDLQGRGVPS IDRLRLVLLML PHTMAQIMAE QEVENLSGLS TNPERDIFVV RENGTTCLMA 60
 EFAAKFIVPY DWASNYVDL ITEQADIALT RGAEVKRGCG HSQSELQVFW VDRAYALKML 120
 FVKSSEHMK GPSATWRLSK VQFVYDSSEK THFDVAVSAG KHTANSHHLS ALVTFAKSKY 180
 ECQAQQFISL ASQDQKFTV MILSAVHIQF FDIISDFVPS REBKCPVDER BQLBETLPLI 240
 LGLLGLVIM VTLAIYVHH KMTANQVQIP RDRSQYKMG

Seq ID NO: 459 DNA sequence
 Nucleic Acid Accession #: NM_001169.1
 Coding sequence: 85..870

1 11 21 31 41 51

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TAGGAGATAA	GAGTATCTTG	CACAGCAGGT	GCAGGTTTCC	CAGCAGCTCA	GGCAAGAGTC	60
CGATGTTTGT	GCCATCTGAT	CCTGATGTCT	GGAGAGATAG	CCATGTGTGA	GCCTGAATTT	120
GGCAATGACA	AGGCCAGGGA	GCCGAGCGTG	GGTGGCAGGT	GGCGAGTGTC	CTGGTACGAA	180
CGGTTTGTGC	AGCCATGTCT	GGTCGAACTG	CTGGGCTCTG	CTCTCTTCAT	CTTCATCGGG	240
TGCCGTGCGG	TCATTGAGAA	TGGGACGGAC	ACTGGGCTGC	TGCAGCCGCG	CCTGGCCAC	300
GGGCTGGCTT	TGGGCTCGT	GATTGCCACG	CTGGGGAATA	TCAGTGGTGG	ACACTTCAAC	360
CTTGCCTGTG	CCTTGGCAGC	CATGCTGATC	GGAGGCTTCA	ACCTGGTGAT	GCTCCTCCCG	420
TACTGGGTCT	CACAGCTGCT	CGGGGGGATG	CTCGGGGCTG	CCTTGGCCAA	GGTGGTGAGT	480
CTTGAGGAGA	GGTCTGGGAA	TGCATCTGGG	GCGGCCCTTG	TGACAGTCCA	GGAGCAGGGG	540
CAGGTGGCAG	GGGCGTTGGT	GGCAGAGATC	ATCCTGACGA	CGCTGCTGSC	CCTGGCTGTA	600
TGCATGGGTG	CCATCAATGA	GAAGACAAAG	GGCCCTCTGG	CCCCGTTCCT	CATCGGCTTT	660
GGCGTCACCG	TGGATATCCT	GGCTGGGGGC	CCTGTGTCTG	GAGGCTGCAT	GAATCCCGCC	720
CGTGCCTTGG	GACCTGCGGT	GCTGGCCAAAC	CACCTGGAAC	TCCACTGGAT	CTACTGGCTG	780
GGCCCACTCC	TGGCTGGCCT	GCTTGTGGGA	CTGCTCATTG	GGTGCTTCAT	TGGAGATGGG	840
AAGACCCGCC	TCATCTTGAA	GGCTCGGTGA	GCAGAGCTCG	TGGGATTCCT	GCTGCTCCAG	900
GTGCTCTCAG	CTCACCTGTC	CCAGACTGAG	GACAGGGGAG	TTCTTGCAAT	TCTTCCACAG	960
CGAGAGGCC	AGAGGAGCGA	CCCTGTGCTT	CCACTGCTTG	GGCTGCTTT	CTCAGATAGA	1020
CTGACTGCTG	AGGAGGCTCT	AGGTTCTTGG	AATTCCTTGG	TGCTCATCAG	AGACCCGAGC	1080
CTGGGGAACA	CGCTGCCCCG	ACTGCCGAGA	GAGCAGTGCA	AACACCCACA	CACGAGCGTG	1140
TTTCTTGAGA	GGAAATGTCC	CGAGTTGGAC	AAGGAGGCTG	TTCTGTGACA	TCAGCTCATT	1200
TCCGCGACCC	CATTTCTTGC	TTGATTGCTT	TGTGGGGGGC	CTGGCCACTT	CCTTCTCTCT	1260
CAAGCTGACA	ATTCTCACTT	TGCAATAAAT	AGTCCAGTGT	TTCTTTCAT		

Seq ID NO: 460 Protein sequence
Protein Accession #: NP_001160.1

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MSORIAMCEP	EFENDKAREP	SVGGRNRVSW	YERFVQPCLV	ELLGSAIFIF	IGCLSVIENG	60
TDIGLLQPAL	AHGLALGLVI	ATLGNISGGH	FNPVSLAAM	LIGGLNLVNL	LPYVWSQLLG	120
GMLGAALAKV	VSPERFWNA	SGAAFVTVQE	QQVAGALVA	EIILLTLAL	AVCMGAINER	180
TKGPLAPFSI	GPAVTVDILA	GGFVSGGCMN	PARAFGPVAV	ANHWNEHWY	WLGPLLALGL	240
VGLLIRCFIG	DGKIRLLILKA	R				

Seq ID NO: 461 DNA sequence
Nucleic Acid Accession #: NM_003226.1
Coding sequence: 2..226

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GATGCTGGGG	CTGGTCTGGG	CCTTGTCTGT	CTCCAGCTCT	GCTGAGGAGT	ACGTGGGCCT	60
GTCTGCAAAAC	CAGTGTGCGG	TGCCGGCCAA	GGACAGGGTG	GACTGCGGCT	ACCCCATGCT	120
CACCCCCUAG	GAGTGCAACA	ACCGGGGCTG	CTGCTTTGAC	TCCAGGATCC	CTGGAGTGCC	180
TTGGTGTTC	AAGCCCCTGA	CTAGGAAGAC	AGAATGCACC	TTCTGAGGCA	CCTCCAGCTG	240
CCCCGGGATG	GCAGGCTGAG	CACCTTGGCC	CGGCTGTGAT	TGCTGGGAGG	CAGTGTTCAT	300
CTCAGTTTTT	CTGTCCCTTT	GCTCCCGGCA	AGCTTCTGTC	TGAAAGTICA	TATCTGGAGC	360
CTGATGTCTT	AACGAATAAA	GGTCCCATGC	TCCACCCG			

Seq ID NO: 462 Protein sequence
Protein Accession #: NP_003217.1

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60

MLGLVLALLS	SSSABEYVGL	SANQCAVPAK	DRVDCGYPHV	TPKECNRRC	CFDSRIPGVF	60
WCFKPIRTKT	ECTP					

Seq ID NO: 463 DNA sequence
Nucleic Acid Accession #: NM_002993.1
Coding sequence: 64..408

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GGCACGAGCC	AGTCTCCGCG	CCTCCACCCA	GCTCAGGAAC	CGCGGAACCC	TCTCTTGACC	60
ACTATGAGCC	TCCCGTCCAG	CCGCGCGGCC	CGTGTCCCGG	GTCTTTCGGG	CTCCTTGTGC	120
GGCGTGTCTG	CGCATGCTGCT	CCTGCTGAGG	CCGCGGGGGC	CCCTGCGCAG	CGCTGGTCTT	180
GTCTCTGCTG	TGCTGACAGA	GCTGCGTTGC	ACTTGTTTAC	GGGTACGCTT	GAGAGTAAAC	240
CCCAAAACGA	TTGGTAAACT	GCAGGTGTTT	CCCGCAGGCC	CGCATGCTTC	CAAGGTGGAA	300
GTGGTAGCCT	CCCTGAAGAA	CGGGAAGCAA	GTTTGTCTGG	ACCCGGGAAG	CCCTTTTCTA	360
AAGAAAGTCA	TCCAGAAAT	TTTGACAGT	GGAAACAAGA	AAAAGTGAAT	AACAAAGAA	420
ACCATGCATC	ATAAATTTGC	CCAGTCTTCA	GCGGAGCAGT	TTTCTGGAGA	TCCCTGGACC	480
CAGTAAGAGT	AAGAAGGAAG	GGTGGTTTTT	TTTCCATTTT	CTACATGGAT	TCCCTACTTT	540
GAAGAGTGTG	GGGGAAGGCC	TACGCTTCTC	CCTGAAGTIT	ACAGCTCAGC	TAATGAAGTA	600
CTAATATAGT	ATTTCACACT	TTTACTGTGA	TTTACCTGTA	TAAGTATTAG	AACCTTTTGG	660
CAATTGACCA	TATTGTGAGC	AAGAATTCAC	TGGTTATTAG	TCITTCATAG	AATATTGAAT	720
TGAAGATAAC	TATTGTATTT	CTATCATACA	TTCTTAAAG	TCTTACCGAA	AAGGCTGTGG	780
ATTTCGTATG	GAAATAATGT	TTTATTAGTG	TGCTGTGGAG	GGAGGTATCC	TGTTGTTCCT	840
ACTCACTCTT	CTCATAAAT	AGGAATAATT	TGAGTTCTGT	TTTCTTGGGG	AATATGTTAC	900
TCTTTACCTT	AGGATGCTAT	TTAAGTGTGA	CTGTATTAGA	ACACTGGGTC	TGTCATACCG	960
TATCTGTGTC	AGAAATATTT	TCCTTATTC	GAATTTCTAA	AAATTTAAGT	TCTGTAAAGG	1020
CTAATATATT	CTCTTCTAT	GGTTTTAGAT	GTTTGTATGC	TTCTTAGTAT	GGCATAATGT	1080
CATGATTTAC	TCATTAAACT	TTGATTTTGT	ATGCTATTTT	TTACATATAG	GATGACTATA	1140

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ATTTCGGTCA CTAATATATAC ACITTAGATA GATGAAGAG CCCAAAAACA GATAAATTCC 1200
TGATTGCTAA TTACATAGA AATGTATTCT CTGGTTTTT TAAATAAAG CAAAATTAC 1260
AATGATCTGT GCTCTGCAA GTTTTGAAA TATATTTGAA CAATTGAAAT ATAAATTATC 1320
CAATTAGTCC TCAAAATATA TACAGCATTG CTAAGATTTT CAGATATCTA TTGTGGATCT 1380
TTTAAAGGTT TTGACCATTT TGTATGAGG AATTATACAT GTATCACATT CACTATATTA 1440
AAATTGCACT TTTATTTTTT CCTGTGTGTC ATGTTGGTTT TTGTACTTG TATTGTCAAT 1500
TGGAGAAACA ATAAAGATT TCTAAACCA AAAAAA AAAAAA

Seq ID NO: 464 Protein sequence
Protein Accession #: NP_002984.1

1 11 21 31 41 51
| | | | |
MSLPSSRAAR VPGPSGSLCA LLALLLLLT PGLASAGFV SAVLTELRCT CLRVTLRVNP 60
KTIGKLQVFP AGPQCSKVEV VASLKNKQV CLDPKAPFLK KVIQKILDSG NKKN

Seq ID NO: 465 DNA sequence
Nucleic Acid Accession #: NM_002038.2
Coding sequence: 108..500

1 11 21 31 41 51
| | | | |
GAAACCGTTA CTCGCTGCTG TGCCCATCTA TCAGCAGGCT CCGGGCTGAA GATTGCTTCT 60
CTCTCTCTCT CCAAGGTCTA GTGACGGAGC CCGCGCGCGG CGCCACCATG CCGCAGAGGG 120
CGGTATCGCT TTTCTGTGTC TACCTGCTGC TCITCACTTG CAGTGGGGTG GAGCAGGTA 180
AGAAAAAGTG CTCGGAGAGC TOGGACAGCG GCTCCGGGTT CTGGAAGGCC CTGACCTTCA 240
TGCCCGTCCG AGGAGGACTC GCAGTCGCGG GGCTGCCCGC GCTGGGCTTC ACCGGCGCCG 300
GCATCGCGGC CAACTCGGTG GCTGCCCTGC TGATGAGCTG GTCTGCEATC CTGAATGGGG 360
CGCGGTGTCG CCGCGGGGGG CTAGTGGCCA CGCTGCAGAG CCGCGGGGCT GGTGGCAGCA 420
GGGTGCTCAT AGGTAAATAT GTTGCCCTGA TGGGCTACGC CACCCACAGT TATCTCGATA 480
GTGAGGAGGA TGAGGAGTAG CCAGCAGCTC CCAGAACCCT TCTTCCCTTC TTGGCCTAAC 540
TCTTCAGTT AGGATCTAGA ACTTTGCCCT TTTTTTTTTT TTTTTTTTTT TTTGAGATGG 600
GTTCTCACTA TATTGTCCAG GCTAGAGTGC AGTGGCTATT CACAGATGCG AACATAGTAC 660
ACTGCAGCCT CCAACTCCTA GCCTCAAGTG ATCCTCCTGT CTCACCTCC CAAGTAGGAT 720
TACAAGCATG CGCCGACGAT GCCCAGATC CAGAACTTG TCTATCACTC TCCCAACAA 780
CCTAGATGTG AAAACAGAAAT AAACCTCACC CAGAAAA

Seq ID NO: 466 Protein sequence
Protein Accession #: NP_002029.3

1 11 21 31 41 51
| | | | |
MRQKAVSLPL CYLLLFCTSG VEAGKKKCBSE SSDSGSGFWK ALTFMAVGGG LAVAGLPALG 60
PTGAGIAANS VAASLMSNSA ILNGGGVPAG GLVATLQSLG AGGSSVVIGN IGALMGYATH 120
KYLDSSEDEE

Seq ID NO: 467 DNA sequence
Nucleic Acid Accession #: NM_003469.2
Coding sequence: 92..1945

1 11 21 31 41 51
| | | | |
GAAACGGCCC GAGAAGCTCG CCGGAGAAC GGGGAGGAAT ATGCTGTGGA GCTCCTCTGC 60
CATATAAACA AAAAGAGGAA ATCTTTCAA CATGGCTGAA GCAAAGACCC ACTGGCTTGG 120
AGCAGCCCTG TCCTCTATCC CTTTAAATTT CCTCATCTCT GGGGCTGAAG CAGCTTCATT 180
TCAGAGAAAC CAGCTGTCTC AGAAAGAAC AGACCTCAGG TTGGAAATG TCCAAAGATT 240
TCCAGTCTCT GAAATGATCA GGGCTTTGGA GTACATAGAA AACCTCCGAC AACAGCTCA 300
TAAGAGAGAA AGCAGCCAG ATTATAATCC CTACCAAGGT GTCTCTGTCC COCTTCAGCA 360
AAAAGAAAT GGGGATGAAA GCCACTTGCC CGAGAGGGAT TCAGTGAGTG AAGAAGACTG 420
GATGAGATA ATACTGAAAG CTTTGAGACA GGCTGAAAT GAGCCTCAGT CTGCACCAA 480
AGAAATAG CCCTATGCTT TGAATTCAGA AAAGAACTTT CCAATGGACA TGAGTGATGA 540
TTATGAGACA CAGCAGTGGC CAGAAAGAAA GCTTAAGCAC ATGCAATTCC CTCCTATGTA 600
TGAGAGAAAT TCCAGGATA ACCCTTTAA AGGCACAAAT GAAATAGTGG AGGAACATA 660
TACTCTCAA AGCTTGTCTA CATTGGAATC TGTCTTCAA GAGCTGGGGA AACTGACAGG 720
ACCAACAGC CAGAAACGTG AGAGGATGGA TGAGGAGCAA AAACCTTATA CGGATGATGA 780
AGATGATATC TACAAGGCTA ATAACATTGC CTATGAAGAT GTGGTCGGGG GAGAAGACTG 840
GAACCCAGTA GAGGAGAAAA TAGAGAGTCA AACCCAGAAA GAGGTGAGAG ACAGCAAGA 900
GATATAGGA AAAAATGAAC AAATCAACGA TGAGATGAAA CGCTCAGGGC AGCTTGGCAT 960
CCAGGAGAA GATCTTGGGA AAGAGAGTAA AGACCACTC TCAGATGATG TCTCCAAAGT 1020
AATTGCTTAT TTGAAAGGT TAGTAATGC TGCAGGAGT GGGAGGTTAC AGAATGGGCA 1080
AATGGGGAA AGGGCCACCA GGCTTTTGA GAAACCTCT GATTCTCAGT CTATTATCA 1140
GCTGATTGAA ATCTCAAGGA ATTTACAGAT ACCCCAGAA GACTTAATG AGATGCTCAA 1200
AATGGGGAG AAGCCGAAATG GATCAGTGGG AGCTGTGACC TTCTGTGTA 1260
CCTAGATGAC ATCTCAGAGG CTGACTTGA CCATCCAGAC CTGTTCCAA ATAGGATGCT 1320
CTCCAGAGT GGTACCCCTA AAACACCTGG TCGTGTGCGG ACTGAGGCC TACCAGACGG 1380
GCTCAGTGT GAGGATATTT TAAATCTTT AGGGATGGAG AGTGACAGCA ATCAGAAAAC 1440
GTGTAATTT CCCAATCCAT ATAACCAGGA GAAAGTTCTG CCAAGGCTCC CTTATGTGTC 1500
TGAAGATCT AGATCGAAC AGCTTCCAA AGCTGCTGG ATTCACATG TTGAAAACAG 1560
ACAGATGGCA TATGAARACC TGAACAGCA GATCAGAGAA TTAGGTGAGT ACTTGGCCAG 1620
GATGCTAGT AAATACCCCTG AGATCATTA TTCAAACCA GTGAAGCGAG TTCTGTGTC 1680
AGGCTCATCT GAGATGACC TGCAGGAAGA GGAACAAAT GAGCAGCCA TCAAGAGCA 1740
TTTGAATCAA GCGAGCTCTC AGGAGACTGA CAGCTGGCC CCGGIGAGCA AAAGGTTCCC 1800
TGTGGGGCC CCGAAGAAAG ATGATACCCC AATAGGCCAG TACTGGGATG AAGATCTGTT 1860
AATGAAGTG CTGGAATACC TCAATCAAGA AAAGCAGAA AAGGGAAGGG AGCATATTG 1920

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TAAGAGAGCA ATGGAAAATA TGTAAGCTGC TTTCATTAAT TACCCCTACTT TCATTCCTCC 1980
CACCCCAAGC AAATCCCAAC ATTTCTCTTC AGTGTGTGA CTCTATCTCT GTTAACACTG 2040
TAATATCTTT AAATGATGTA CAGGCAGATG AAACCCAGTC ACTGGGGAGT CTGCTTCATT 2100
TCCTCTGAGC TGTATCTCTG TGTATGGATA TGTGTAAATG TTATGACTCC TTGATAAAAA 2160
ATTTATTATG TCCATTATTC AAGAAAGATA TCTATGACTG TGTTTAATAG TATATCTAAT 2220
GGCTGTGGCA TTGTTGATGC TCACATATGA TAAAAAAGTG TCCTATAAAT CTATTGAAAG 2280
TTTTTAATAT TTATTGAATT ATTTTGTATC TGTCTGTAGC GTTTTGTGGA GTACTGGACC 2340
AAAAAATAAA AGCATTATAA ATATA
  
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Seq ID NO: 468 Protein sequence
 Protein Accession #: NP_003460.1

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1 11 21 31 41 51
MAEAKTHWLG AALSILPLIF LISGASAAAF ORNQLLQKSP DLRLNVQKF PSEPMIRALE 60
YIENLRQQAQ KEESSPDYNP YQGVSVPLQQ KENGDESHLP ERDLSREEDW MRILILEALRQ 120
AENEPEQSAFK ENKPYALNSE KNFPMDSDD YETQQWPERK LKHMQPFPMY HENSRDNPFK 180
RTNEIVEBOY TPQSLATLES VFQELGKLTC FNNQXRRERMD ESQKLYTDEE DDIIYKANNIA 240
YEDVVGGEDW NFVEEKLESQ TQEEVRDSKE NIGKNEQIND EMKRSQQLGI QREDLRKESK 300
DQLSDDVSKV IAYLKLRLVA AGSGRLQNGQ NGERATRLFE KPLDSQSIYQ LIHISNLQI 360
PFEDLIELKL TGEKPNGSVE PERKLDLPVD LDDISEADLD HPDLFQWRML SKSGYFKTPG 420
RAGTEALPDG LSVEDIINLL GMSAANQKT SYFPNPYNQE KVLPRLPYGA GRSRSNQLPK 480
AAWIFHVBNR QMAYENLNDK DQELGEYLAR MLVKYPEIIN SNQVKRVFQG GSEDDLQEE 540
EQIEQAIKEH INQSSSQETD KLAPEVSKRFP VGPPKNDTTP NRQYWDDELK MKVLEYLNQE 600
KAEKGRBHLA KRAMENM
  
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Seq ID NO: 469 DNA sequence
 Nucleic Acid Accession #: NM_006398.1
 Coding sequence: 19..516

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1 11 21 31 41 51
GGCCCCCTGT CTGCAGAGAT GGCTCCCAAT GCTTCCTGCC TCTGTGTGCA TGTCCGTTCC 60
GAGGAATGGG ATTTAATGAC CTTTGATGCC AACCCATATG ACAGCGTGAA AAAAAATCAA 120
GAACATGTCC GGTCTAAGAC CAAGGTTCCT GTGCAGGACC AGGTTCCTTT GCTGGGCTCC 180
AAGATCTTAA AGCCACGGAG AGCCCTCTCA TCTTATGSCA TTGACAAAGA GAAGACCATC 240
CACCTTACCC TGAAAGTGCT GAAGCCCAAT GATGAGGAGC TGCCCTTGTT TCTGTGAG 300
TCAGGTGATG AGGCAAGAG GCACCTCCTC CAGGTGCGAA GGTCCAGCTC AGTGGCACAA 360
GTGAAAGCAA TGATCGAGAC TAAGACGGGT ATAATCCCTG AGACCCAGAT TGTGACTTGC 420
AATGGAAGA GACTGGAAGA TGGGAAGATG ATGGCAGATT ACGGCATCAG AAAGGGCAAC 480
TTACTCTTCC TGGCATCTTA TTGTATTGGA GGGTGACCAC CCTGGGGATG GGGTGTGGC 540
AGGGGTCAA AAGCTTATTT CTTTAAATCT CTTACTCAAC GAACACATCT TCTGATGATT 600
TCCCAAAATT AATGAGATG AGATGAGTAG AGTAAGATTG GGGTGGGATG GGTAGGATGA 660
AGTATATTGC CCAACTCTAT GTTCTCTTGA TTCTAACACA ATTAATTAAAG TGACATGATT 720
TTTACTAATG TATTACTGAG ACTAGTAAAT AAATTTTAA GGCRAAATAG AGCATTG
  
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Seq ID NO: 470 Protein sequence
 Protein Accession #: NP_006389.1

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 55

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1 11 21 31 41 51
MAPNASCLCV HVRSEKNDLM TFDANPYDSV KKIKEHVRSK TKVPVQDQVL LLSKILKPR 60
RSLSSYGIDK ERTIHLTLKV VKPSDEELPL FLVESGDBAK RHLLQVRRSS SVAQVKAMIE 120
TKTGIIETQ IVTCNGKRLK DKKMMADYGI RKGNIILFLAS YCIGG
  
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Seq ID NO: 471 DNA sequence
 Nucleic Acid Accession #: XM_094741.1
 Coding sequence: 1..948

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1 11 21 31 41 51
ATGAAGGCCA ACTACAGCGC AGAGGAGGCG TTCTCTCTGC TGGGTTCTTC CGACTGGCCT 60
TCCCTGCAGC CGGTCTCTCT CGCCCTTGTC CTCTCTGCT ACCTCTGAC CTTGACGGGC 120
AACTCGGCGC TGTGTCTGCT GCGGTGCGGC GACCGCGGCC TGACACGCGC CATGTACTAC 180
TTCTCTGCCC ACTTGGCCCT GTTAGACGCG GGCCTCACTA CTAGCGTGGT GCGCGCGCTG 240
CTGGCCAACC TGCGCGGACC AGCGCTCTGG CTGCGCGGCA GCCACTGCAC GGCCTCAGCTG 300
TGCGCATGCG TGACTCTGGG TTGCGCCGAA TGGTCTCTCC TGGCGGTGAT GGCTCTGGAC 360
CGCGCGGCGC CAGTGTGCGC CCGCTGCGGC TATGCGGGGC TCGTCTCCCC GCGCTATGTT 420
CGCAAGCTGG CAGCGCGCTC CTGGCTAAGC GGCCTCACCA ACTCGGTTGC GCAAAACGCG 480
CTCTGGCTG AGCGCGGCGT GTGCGGCGCC CGCTCTCTGG AACACTTCAT CTGTGAGCTG 540
CGCGCGTTGC TCAAGCTGGC CTGCGGAGGC GACGAGAGCA CTACCGAGAA CCAGATGTTT 600
GCGGCGGCGC TGGTCATCTT GCTGCTGCGG TTTGCGCTCA TCTGGGCTTC CTACGGTGCC 660
GTGGCGGCGC CTGCTGTTG CATGCGGTTT AGCGGAGGCC GGAGGAGGCC GGTGGGCACG 720
TGTGGGTTCC ACTTGACAGC CGTCTGCGCT TTCTACGGCT CGGCTATCTA CACCTACCTG 780
CAGCGCGGCG AGCGCGTACAA CAGGCAAGCG GCGAAGTTGG TATCGCTCTT CTACACCGTG 840
GTCACACCTG CTCTCAACCC GCTCATCTAC ACCCTCAGGA ATAAGAAAGT GAAGGGGGCA 900
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Seq ID NO: 472 Protein sequence
 Protein Accession #: XP_094741.1

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1 11 21 31 41 51
MKANYSABER FLLLGFSDFP SIQPVLFALV LLCYLLTGTG NSALVLLAVR DPRLHTPMY 60
  
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FLCHLALVDA GPTTSVVPPL LANLRGPALW LPRSECTAQL CASLALGSAB CVLLAVMALD 120
 RAAAVCRPLR YAGLVSPRLC RTLASASWLS GLTNSVAQTA LLAERPLCAP RLLDEFICEL 180
 PALLKLACGG DGDITFENQMF AARVVILLLP FAVILASYGA VARAVCCMRP SGGRRRAVGT 240
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Seq ID NO: 473 DNA sequence
 Nucleic Acid Accession #: NM_001062.1
 Coding sequence: 76..1380

1 11 21 31 41 51
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 TCCTTTATTC CAAGCCAACT ATGCGAGATT TGTGAGGTAA GTGAAGAAAA CTACATCCGC 180
 CTAAGAACCTC TGTGTAATAC AATGATCCAG TCAAACTATA ACAGGGGAAC CAGCGCTGTC 240
 AATGTTGTGT TGTCCCTCAA ACTTGTGGGA ATCCAGATCC AAACCTGAT GCAGAAAGATG 300
 ATCCACAAAT TCAATATCAA TGTGAAAAGC AGATTGTGAG ATGTAAGCTC GGGAGAGCTT 360
 GCCTTGATTA TACTGGCTTT GGGAGTATGT CGTAACGCTG AGGAAAACTT AATATATGAT 420
 TACCACTGA CTGACAGCT AGAAAAATAA TTCCAAGCAG AATTTGAAAA TATGGAAGCA 480
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 CTGTTCAATG GGAACATACT AACCGCCGAA GTTGTCAACC ACTTCACTCC TGAAAAATAA 600
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 AACATCAGTA TTTATACAAA GTCACTGGTA GAAAGATTG TGTCTGAGAA AAAAGAAAT 780
 GGTCTCATTC GAAACACATT TAGCACAGGA GAAGCCATGC AGGCCCTCTT TGTATCATCA 840
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 ATTTCTCAG GAGCATTGAG TAATCCAAAC GCTGCAGCCC AGGTCTTACC TGCCCTGATG 960
 GGAAGAGCTT TCTTGATAT TAACAAAGAC TCTTCTTGG TCTCTGCTTC AGGTAACCTC 1020
 AACATCTCCG CTGATGAGCC TATACTGTG ACACCTCCG ACTCACATC ATATATCTCC 1080
 GTCAATTAAT CTGTGAGAAAT CAATGAAACA TATTTACCA ATGTCACTGT GCTAAATGGT 1140
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 GCCCAAACTT TCCTCAGCTG CATAAAATCC ATTTGCAATG GAGTTCCATG TTTATGTCC 1440
 TTATGCTTTC TTCTCATTT ATCCAGTAC GAGCAGGAGA GTTAATAACC TCCCTTCTC 1500
 TCTCTACATG TTCATAAAA GTTGTGAAA GATTAAC

Seq ID NO: 474 Protein sequence
 Protein Accession #: NP_001053.1

1 11 21 31 41 51
 MRQSHQLPLV GLLLPSFIPS QLCICEVSE ENYIRLKPIL NTMIQSNYNR GTSAVNVVLS 60
 LKLVGIQIQT LMQKHIQIHK YNVRSLSDV SSGELALIL ALGVCRNAEE NLIVDYHLLD 120
 KLENKFAEI ENMEAHNGTP LNYVQLSLD VLALCLFNGN YSTASVNHFF TPENKNYYFG 180
 SQSHVDTGAM AVLALTCVKK SLINGQIKAD RSSLKNIYIY TKSLSVERILS EKKENGLIGN 240
 TFSSTGEAMDA LFVSSDYNE NDNHCQQTIN TVLITEISQGA FSNPNAAQV LPALMGKIFL 300
 DINKDSVCVS ASGNEMISAD EPTVTTPDS QSYISVNYSV RINETYFTNV TVLNGSVFLS 360
 VMEKAQKMD TIFGPTMEER SWGFIYTCIQ GLCANNNDRT YWELLSGGEP LSQAGSYVV 420
 RNGENLEVRW SKY

Seq ID NO: 475 DNA sequence
 Nucleic Acid Accession #: NM_004852.1
 Coding sequence: 89..1546

1 11 21 31 41 51
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 CACTTTGCAC GCGCGCGCGG GCGCGGSCAG TGGCGCGGCG GCGCGCGGGG GCGCGCGGGG 180
 CGCGCGCGCG GCGCGCGGCT ATGAGCAGGA GTGCTGGCC AGCCCCAGCC CCCACCAAGC 240
 GCGCGCGGCG CGCGTGGCT CGCTGCGGG CCCTCGGCG CCGCAACCG CGCACCAAGG 300
 GCTGGGCACG GCGGACGCG GCGCAGCGG CGGCTGCGG TCGGCCATGG TCACCAAGCT 360
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 CATGAGCATG TCCCTGCACT CGTCTCGCC TGGCATGGG ATGAGCAACA CCTACACAC 480
 GCTGACACCG CTCCAGCGG TGCCACCCAT CTCCACCGT TCTGACAGT TCCACCAACC 540
 TCACCCGAC CACCATCCG ACCACCAACA CCACCAACC CACCAAGCGG TGTCCGCGA 600
 CGTCAGCGCG AGCTTCACCC TCATGCGGGA CGAGCGCGG CTCCCGGCGA TGAACAACCT 660
 CTACAGTCCC TACAAGGAGA TGCCCGGCAT GAGCCAGAGC CTGTCCCGCG TGGCGGCCAC 720
 GCGCTGGCG ACAGCGCTAG GCGGCTTCCA CAAGCGCGAG CAGAGTCTG CCAACTAAGG 780
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 GACCGCGGCT GAGCAACACC TGTCCCGCG CCTGGGCACC CACCTGCGG CCATGATGTC 900
 GCACCTGAAC GCGCTGCACC ACCCGGGCCA CACTCAGTCT CAGGGCGGG TGTGGCACC 960
 CAGTGGCGAG CGGCCACCTT CGTCTCATC GGGCTGCGAG GTGGCCACGT CGGCGCAGCT 1020
 GGAAGAAATC AACACCAAG AGGTGGCCCA GCGCATCACA GCGAGCTGA AGCGCTACAG 1080
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 GACACCGGAT TCCTAGCTGG GGCCCTTCAC TGGTG

5 Seq ID NO: 476 Protein sequence
 Protein Accession #: NP_004843.1

1 11 21 31 41 51
 10 MNPELTMESL GTLHGARGGG SGGGGGGGGG GGGGGPGHEQ ELLASPSPHH ARRGPRGSLR 60
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 DERGLPAMNN LYSFYKEMPG MSQSLSPALAA TPLGNGLSGL HNAQQSLFNY GPPGHDKMLR 240
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 15 SSSQVATSGQ LEEINTKEVA QRITAEIKRY SIPQAIFAQR VLCSRSQGLS DLLRNPKFWS 360
 KLKSGRETFR RMNKLQEPZE FQMSALRLA ACKRKEQEPN KDRNNSQKKS RLVPFDLQRR 420
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 TCTKA

20 Seq ID NO: 477 DNA sequence
 Nucleic Acid Accession #: NM_013271.1
 Coding sequence: 27..809

1 11 21 31 41 51
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 30 TGCAAGAGCT GCGCGGGGCG CTGGCGCATC TGCTGGAGGC CGAACGTCAG GAGCGGGCGC 300
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 35 CCGAGCTTGT CCGCGCGCGC GTCCCGCGCG CGGCGCTCGC ACCCCGCGCG CCGCTCTAGC 540
 ACGACGGCCC CCGGGGCGCG GATGCTGAGG AGGCAGGGGA CGAGACACCC GAGCTGGACC 600
 CCGAGCTTGT GAGTACTTGT CTGGGACGGA TTCCTGGGGG AAGCGCGGAC TCCGAGGGGG 660
 TGGCAGCGCC GCGCCGCGCT CCGCGTGGCG CGGACACGGA TGTGGGCTCT GAGCTGCGCC 720
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 40 TGCTGTCGCG CCGCTCTGTG CCACCTGAG CACTGCGCGG ATCCCGTGCA CCTTGGGACC 840
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 GATCTGAGC

45 Seq ID NO: 478 Protein sequence
 Protein Accession #: NP_037403.1

1 11 21 31 41 51
 50 MAGSPLLWGP RAGVGILLVL ILLGLFRPPP ALCARPVKEP RGLSAAAPPL AETGAPRRFR 60
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 PALGLDDDDP APAQLARAL LRARLDPAAL AQQLVAPVP AAALRPFPV YDDGPAGEDA 180
 EBAGDETPDV PELLRLVLLG RILAGSADSE GVAAPRELRR AADHDVBSGL PPBGVLGALL 240
 RVKRLSTPAP QVPARRLLFP

55 Seq ID NO: 479 DNA sequence
 Nucleic Acid Accession #: NM_002214
 Coding sequence: 681..2990

1 11 21 31 41 51
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 GTTGGGCTCC CTGCCCACTT GTGGAAGCAA CTGGCTGAT TGATGCGCCA CAGACTTTT 180
 65 TCCCTCGGAC CTGCGCGGCG TACCTCCCA CAGATCCAGC ATCACCCAST GAATGTACAT 240
 TAGGGTGCTT TCCCCCCCAG CTTCGGGCTT TGTTTGGGTT TGATGTGTGT TGGCTCTTCG 300
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 TGTCCCGGAG CAGGCTGCGG AGCCCTTGCA GAGCCCTCTC TCCAGTCCGC GCGGGGCCCT 420
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 70 GCGCGTAGGG GCCCTGAGAT GCGGAGCGGT GCGCGGCGCC GCTTACCTGC ACCGCTTGCT 540
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 80 ATTTTATGCT GAAAGTTGAT CCTCGAAGA AATATCTGT GATCTTTTAT TCTCTGTTG 1140
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GAATGTTAA

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Seq ID NO: 480 Protein sequence
Protein Accession #: NP_002205

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SRDFRLQPGS YVDKTVSPYI SIHFERIHNQ CSDYNLDCMP PBGYIHVLSL TENITEFEKA 240
VHRQKISGNI DTPEGGFDM LQAAVCSESH GWRKEAKRL LVMITDQTSHL ALDSKLALIV 300
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TIAGESIESKA ANLNVLVEA YQKLISEVKV QVENVQVQIY FNITAIQPDG SRKPGMECCR 420
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CSGRGTQVCG RCECTDPRSI GRFCEHCFTC YTACKENWNC MQCLHPRNLS QALDQCKETS 660
CALMEQQHYV DQTESECFSSP SYLRIFFIIF IVTFLLGLLK VLIHQVILQ WNSNKKXSSS 720
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Seq ID NO: 481 DNA sequence
Nucleic Acid Accession #: NM_003318.1
Coding sequence: 1..2574

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5 GAATCAAGTC TTCTAGCTAA ATTAGAAGAA ACTAAAGAGT ATCAAGAAAC AGAGGTTCCA 1140
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 15 CATGGCATTG TCTTAAACCA GCTAACTTTC TGTAGTTGA TGGAAATGCTA 1980
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 20 ATTTCTAAT TACATGCCAT AATTGATCCT AATCATGAAA TTGAATTTCC CGATATTCCA 2280
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 25 TCTCCTAACT CCATTTTGAA AGCTGCTAAA ACTTTATATG AACACTATAG TGGTGGTGAA 2520
 AGTCTAATTT CTTCATCCTC CAAGACTTTT GAAAAAAGAA GGGGAAAAAA ATGA

Seq ID NO: 482 Protein sequence
 Protein Accession #: NP_003309.1

30 1 11 21 31 41 51
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 35 AIQEPIDARD YFQMARANCK KFAFVHISFA QFELSQENVK KSKQLLQKAV ERGAVPLEML 180
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 Protein Accession #: NP_005747.1

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Seq ID NO: 490 Protein sequence
 Protein Accession #: Eos sequence

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LSLSELKRSE LNKTLQTLSE TYFIMCATAE AQSTINCTPT IKLNNTMNAF AVIAALERVK 180
IRPMEECCCS VRTPCPSPSE ELEKLQCDLQ DPTVLADHP RGPFFSSQS IPVVPRTATV 240
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CCCTCCTCCA ATAGAGTTGA AACACCAAGC CTCAATGATG TTACTTTAAG CTTACTCCCT 240
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	ATCCCTCATCC	AGCPTGTGTC	TGCTCTGCTT	CTGCTGAACC	TGGTCTTCCT	CCTGGGACTCG	2040
	TGGATTGCTC	TGTATAAGAT	GCAAGGCCCT	TGCATCTCAG	TGGCTGTATT	TCTTCATTAT	2100
	TTTCTCTTGG	TCTCATTCAC	ATGGATGGGC	CTAGAAGCAT	TCCATATGTA	CCTGGCCCTT	2160
	GTCAAAGTAT	TTAATACTTA	CATCCGAAAA	TACATCCCTA	AATTCIGCAT	TGTCGGTTGG	2220
	GGGGTACCAG	CTGTGGTGTG	GACCATCATC	CTGACTATAT	CCCCAGATAA	CTATGGGCTT	2280
	GGATCCTATG	GGAAATTCOC	CAATGGTICA	COGGATGACT	TCTGCTGGAT	CAACAACAAT	2340
10	GCAGTATTCT	ACATTACGGT	GGTGGGATAT	TTCTGTGTGA	TATTTTGTCT	GAACGTCAGC	2400
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15	GAAAATGTCA	GGAGCAATG	GAGGCGGTAT	CTTTGTGTG	GAAAGTTACG	GCTGGCTGAA	2700
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	GTGTCCAGCT	CTTCAATTC	CTTACAGTCA	AGCAGTAACT	CCACTAACTC	CACCACACTG	2820
	CTAGTGAATA	CTGATTCCTC	AGTACACGCA	AGCGGAATG	GAAATGCTTC	TACAGAGAGG	2880
	AATGGGGTCT	CTTTAGTGT	TCAGAAATGA	GATGTGTGCC	TTCAAGATT	CACTGGAAAA	2940
20	CAGCACATGT	TTAACGAGAA	GGAGATTCC	TGCAATGGGA	AAGGCCGTAT	GGCTCTCAGA	3000
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Seq ID NO: 492 Protein sequence
Protein Accession #: Bos sequence

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30	TLNCTPTIKL	NNTMNAACAI	AALERVKIRP	MEHCCCSVRI	PCPSSPEELG	KLQCDLQDFI	240
	VCIADHPRGP	PFSSSQSIPV	VPRATVLSQV	FKATSPAEPP	DYSPVTHNVF	SPIGEIOPLS	300
	PQPSAPIASS	PAIDMPPQSE	TISSPMPQTH	VSGTTPPVKA	SPSSPTVSAP	ANVNTTSAPP	360
	VQTDIVNTSS	ISDLENQVLQ	MEKALSLSGL	EPNLAGEMIN	QVSRLLHSP	DMLAPLAQL	420
	LKVVDDIGLQ	LMFSNTTISL	TSPSLALAVI	RVNASSFNMT	TFVAQDPANL	QVSLSTQAE	480
35	NSIGTITLPS	SLMNNLPAHD	MELASRVQFN	FFETPALEQD	PSENLSSLIS	VVISSSVANL	540
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	SHLTSFGLV	DLSESTVLPA	QMMALTFFTY	IGCGLSSIFL	SVTLVITYIAF	EKIRRDYPSK	660
	ILIQLCALLL	LLNLVFLPDS	WIALYKMQGL	CISVAVFLHY	FLLVSTFWMG	LEAFHMYLAL	720
	VKVENTYIRK	YLKFCYVGV	GVPVAVVTII	LTISPENYGL	GSYKFPENG	PDDFCWINNN	780
40	AVFYITVVGY	FCVIFILNVG	MFIVVLVQLC	RIKKRKQLGA	QRKTSIQDLR	SIAGLTFFLG	840
	ITWGFAPFAW	GFNVTFMYL	PAIFNTLQGF	PIFIFYCVAK	ENVRKQWRRY	LCCGKLRLAE	900
	NSDWSKATIN	GLKKQTVNQG	VSSSSNSLQS	SENSTNSTTL	LVNNDCSVHA	SGNGMASTER	960
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55	ATGCCCTCTGC	CCTGGAGCCT	TGCGCTCCCG	CTGCTGCTCT	CCTGGGTGGC	AGGTGGTTTC	300
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	TTGACTTTGT	ATGTCAGTTC	CCTGGTTTTT	TTGATATTGC	ATCATAGGAC	CTCTGGCATT	1980
	TTAGAAATTAC	TAGCTGAAA	ATTGTAATGT	ACCAACAGAA	ATATTATTGT	AAGATGCCCT	2040

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Seq ID NO: 494 Protein sequence
 Protein Accession #: NP_056322

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 TCAGAAATAA TTGACTCAT TTCACACAAA GGTATATGAC AACATATAC CTGAAAACAG 2580
 75 AATGTGCAG GTTATATAA TTTTTEAAT AGTGTGGAG GACAGAGTTA GAGGAATCTT 2640
 CCTTTTCTAT TTATGAGAT TCTACTCTTG GTAAGAGTAT TTTAAGATGT ACTATGCTAT 2700
 TTTACCTTTT TGATATAAAA TCAAGATATT TCTTTGCTGA AGTATTTAAA TCTTATCCTT 2760
 GTATCTTTT ATACATATT GAAATATAGC TTATATGTAT TTGAATCTTT TTGAAATCCT 2820
 ATTCAAGTAT TTTTATCAT CTATTTGTAT ATTTTAGCAC TTGTGTAGCT TTTCACTGAA 2880
 80 ATTCTAAGA AATTTGTAAA ATAGTCTTCT TTTATACTGT AAAAAAGAT ATACCAAAAA 2940
 GTCTTATAAT AGGAATTTAA CTTTAAAAAC CCACTTATTG ATACCTTACC ATCTAAAATG 3000
 TGTGATTTT ATAGTCTCTT TTTAGGAATT TCACAGATCT AATTTATGTA ACTGAAATAA 3060
 GGTCTTACT CAAAGAGTGT CCACATTTGA TTGTATTATG CTGCTCAGTG ATCCTCTGCG 3120
 ATATTTAAAA TAAATGTGCC TAAAGGGTTA GTAGACAAAA TGTAGTCTT TTGTATATA 3180
 GGCCAAGTGA AATTGACTTC CCTTTTAA TGTTCATGA CCACCAATTG ATGTATTAT 3240

AACCACTTAC AGTTGCTTAT ATTTTGTGTT TTAACITTTG TTTCTTAACA TTTAGAATAT 3300
TACATTTTGT ATTATACAGT ACCTTTCTCA GACATTTTGT AG

Seq ID NO: 496 Protein sequence
Protein Accession #: NP_003497.1

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1	11	21	31	41	51	
MEMPTFLLLTC	IFLEPLLGRHS	LFTCEPITVP	RCMKMAYNMT	FFPNLMGHYD	QSIAAVEMER	60
FLPLANLECS	PNIETFLCKA	FVPTCIEQIH	VVPPCRKLCE	KVYSOCLKLI	DTFGIRWPEE	120
LECDRLQYCD	ETVPVTFDPH	TEFLGPQKRT	BQVQRDIFGW	CPRHDKTSQG	QGYKFLGIDQ	180
CAPPCPNMYY	KSDLEFAFS	FIGTUSIFCL	CATLPTPLTF	LIDVRRFRYP	ERPIIYYSVC	240
YSIVSLMYFI	GFLLGDSTAC	NKADEKLELG	DTVVLGSQNK	ACTVLFMLLY	FFTMASTVWW	300
VILTITMELA	AGRWNSCEAI	BQKAVWPHAV	ANGTPEGFLT	MLLALNKEVG	DNISGVCFVG	360
LYDLDASRYF	VLLFLCLCVF	VGLSLLLAGI	ISLMHVRQVI	QHDGRNQEKI	KKFMIRIGVF	420
SGLYLVPLVT	ILGCTVYEQV	NRITNEITNV	SDRCRQYHIP	CPYQAKAKAR	PELALFMIKY	480
LMTLIVQISA	VFWVGSKMTC	TEWAGFFKRN	RKRDPISSESR	RVLQESCEPF	LGHNSKVXHK	540
KKHYPKPSHK	LKVISKSMGT	STGATANHGT	SAVAITSHDY	LQGETLTETQ	TSPETSMREV	600
KADGASTERL	REQDCGEPAS	PAASISRLSG	EDVDGKGQAG	SVSESARSZG	RISPKSDITD	660
TGLAQSNMLQ	VPSSSEPPSL	KGSTSLLVHP	VSGVRKQGGG	GCHSDT		

Seq ID NO: 497 DNA sequence
Nucleic Acid Accession #: NM_005046
Coding sequence: 16..777

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1	11	21	31	41	51	
GGATTTCGGG	GCTCCATGGC	AAGATCCCTT	CTCCTGCCCC	TGCAGATCCT	ACTGCTATCC	60
TTAGCCTTGG	AACTGTCAGG	AGAAGAAGCC	CAGGGTGACA	AGATTATGTA	TGGCGCCCCA	120
TGTGCAAGAG	GCTCCACACC	ATGGCAGGTG	GCCTGTCTCA	GTGGCAATCA	GCTCCACTGC	180
GGAGGCGTCC	TGGTCAATGA	GCCTGTGGTG	CTCACTGCGG	CCCACTGCAA	GATGAATGAG	240
TACACCGTGC	ACCTGGGCAG	TGATACGCTG	GGCGACAGGA	GAGCTCAGAG	GATCAAGGCT	300
TGGAAGTCAT	TCCGCGACCC	CGGCTACTCC	ACACAGACCC	ATGTTAATGA	CCTCATGCTC	360
GTGAAGCTCA	ATAGCCAGGC	CAGGCTGTCA	TCCATGGTGA	AGAAAGTCAG	GCTGCCCTCC	420
CGCTGCGAAC	CCCCTGGAAC	CACCTGTACT	GTCTCCGGCT	GGGCGACTAC	CACGAGCCCA	480
GATGTGACCT	TTCCTCTGTA	CCTCATGTGC	GTGGATGTCA	AGCTCATCTC	CCCCCAGGAC	540
TGCACGAAGG	TTTACAAGGA	CTTACTGGA	AATTCCATGC	TGTGCGCTGG	CATCCCGGAC	600
TCCAAGAAAA	ACGCTCTCAA	TGGTACTCA	GGGGGACCGT	TGGTGTGAG	AGGTACCTTC	660
CAAGGTCTGG	TGTCTCGGGG	AACCTTCCCT	TGCGGCCAAC	CCAATGACCC	AGGAGTCTAC	720
ACTCAAGTGT	GCAAGTTTAC	CAAGTGGATA	AATGACACCA	TGAAAAAGCA	TGCTAAAGC	780
CACACTGAGT	TAATTAAGTG	TGTGCTTCCA	ACAGAAATG	CACAGGAGTG	AGGACGCCGA	840
TGAOCTATGA	AGTCAATTTT	GACITTACCT	TTCCCTCAAG	ATATAATTAA	ACCTCATGCC	900
CTGTGTGATA	ACCAATCAAA	TTGTAAAGA	CCTAAACCA	AAACAAATA	AGAAACACAA	960
AAOCTTCAA						

Seq ID NO: 498 Protein sequence
Protein Accession #: NP_005037

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1	11	21	31	41	51	
MARSLLLPLQ	ILLLSLALET	AGSRAQGDKI	IDGAPCARGS	HPWQVALLSG	NQLECGGVLV	60
NERNVLTAAR	CKNNESTYEL	GSDTLGDRRA	QRIKASESFR	HPGYSTQTHV	NDLMLVKLWS	120
QARLSSMWKK	VRLPGRCEFP	GTICTVSGNG	TTTSPDVTFP	SDLMCVDVKL	ISPQDCTEVY	180
KDLLENMLC	AGIPDSKONA	CNGDSGGPLV	CRGTLQGLVS	WGTFFCGQFN	DPGVYTVQCK	240
FTKWINDTMK	KHR					

Seq ID NO: 499 DNA sequence
Nucleic Acid Accession #: NM_007196
Coding sequence: 182..962

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1	11	21	31	41	51	
GTTCOCAGAA	GCTCCOCAGG	CTCTAGTGCA	GGAGGAGGAG	GAGGAGGAGC	AGGAGGTGGA	60
GATTCOCAGT	TAAAAGGCTC	CAGAACTGTG	TACCAGGCAG	AGAACTGAAG	TACTGGGGCC	120
TCCTCOCAGT	GGTCCGAATC	AGTAGGTGAC	CCCGCCCTGT	GATTCTGGAA	GACCTCACCA	180
TGGGACBCCC	CCGACTCTGT	GCGGCCAAGA	CGTGGATGTT	CCTGCTCTTG	CTGGGGGGAG	240
CCTGGGCAGG	ACACTCCAGG	GACAGGAGG	ACAAGGTGCT	GGGGGTCTAT	GAGTGCCAAC	300
CCCATTCGCA	GCCTTGGCAG	GCGGCTTTGT	TCCAGGGCCA	GCAACTACTC	TGTGGCGGTG	360
TCCTGTAGG	TGGCAACTGG	GTCCCTTACG	CTGCCACTG	TAAAAAACCG	AAATACACAG	420
TACGCTCGGG	AGACCCACAG	CTACAGAATA	AGATGGCCCC	AGAGCAAGAA	ATACCTGTGG	480
TTAGTTCAT	CCACACCCCC	TGCTACAACA	GCAGCGATGT	GGAGGACCAC	AACCATGATC	540
TGATGCTCT	TCAACTGCGT	GACCAAGCAT	CCCTGGGGTC	CAAAGTGAA	CCCATCAGCC	600
TGGCAGATCA	TTCACCCAG	CCTGGCCAGA	AGTGACCCGT	CTCAGGCTGG	GCACTGTCA	660
CCAGTCCCCG	AGAGAAATTT	CCTGACACTC	TCAACTGTGC	AGAAATGAAA	ATCTTTCCCC	720
AGAAGAAGTG	TGAGGATGCT	TACCCGGGGC	AGATCACAGA	TGGCATGGTC	TGTGACGGCA	780
GCAGCAAAGG	GGCTGACACG	TGCCAGGGCG	ATTCTGGAGG	CCOCTGGTGC	TGTGATGGTG	840
CACATCCAGG	CATCATATCC	TGGGGCTCAG	ACCCCTGTGG	GAGGTCCGAC	AAACCTGGCG	900
TCTATACCAA	CATCTGCCGC	TACCTGGACT	GGATCAAGAA	GATCATAGGC	AGCAAGGGCT	960
GATTCAGGA	TAGCACTAG	ATCTCCCTTA	ATAACTCAC	AATCTCTC		

Seq ID NO: 500 Protein sequence
Protein Accession #: NP_009127

1	11	21	31	41	51
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5 MGRPRPRAAK TMMFLILLGG AWAGHSRAQE DKVLGGHECQ PHSQPWQAAL FQGGQQLCGG 60
 VLVGGNWLVT AAHCKKPKYT VRLGDHSLQN KDGPEQEIPV VQSIFHPFCYN SSDVEDHNHD 120
 LMLLQRLDQA SLGSKVKPIS LADHCTQPGQ KCTVSGWGTV TSPRENFDT LNCAEVKIFP 180
 QKKCEDAYPG QITDGMVCAG SSRGADTCQG DSGSPLVCDG ALQGITSNGS DPCERSDKPG 240
 VYTNICRYLD NIKKIIGSKG

Seq ID NO: 501 DNA sequence
 Nucleic Acid Accession #: NM_006103
 Coding sequence: 29..406

10 1 11 21 31 41 51
 15 CACCTGCACC CCGCCCGGGC ATAGCACCAT GCCTGCTTGT GGCCTAGGCC CGCTAGCCGC 60
 CGCCCTCTCT CTCAGCCTGC TGCTGTTCGG CTTCACCCYA GTCTCAGGCA CAGGAGCAGA 120
 GAAGACTGGC GTGTGCCCGG AGCTCCAGGC TGACCAGAAC TGACAGCAAG AGTGGGTCTC 180
 GGACAGCGAA TGCGCCGACA ACCTCAAGTG CTGCAGCGCG GGCTGTGCCA CCTTCTGCCT 240
 TCTCTGCCCA AATGATAAGG AGGTTCTCTG CCCCAGGTG AACATTAATC TTCCCCAGCT 300
 CGCCCTCTCT CCGGACCAAT GCCAGTGA CAGCCAGTGT CCTGGCCAGA TGAAATGCTG 360
 20 CGCARTGGC TGTGGGAAGG TGTCTGTGT CACTCCCAAT TTCTGAGGTC CAGCCACCAC 420
 CAGGCTGAGC AGTGAAGAGA GAAAGTTTCT GCCTGGCCCT GCATCTGGTT CCAGCCCACT 480
 TGCCCTCCCC TTTTTCGGGA CTCTGTATTC CCTCTGGGC TGACACAGC TTCTCCCTTT 540
 CCAACCAAT AAAGTAACCA CTTTCAGCAA AAAAAAAAAA AAAA

25 Seq ID NO: 502 Protein sequence
 Protein Accession #: NP_006094

30 1 11 21 31 41 51
 MPACRLGFLA AAILLRLLLF GFTLVSGTGA EKTGVCPQLQ ADQNCITQECV SDSECADNLK 60
 CCSAGCATFC LLCPNDKEGS CPQVNIINFPQ LGLCRDQCQV DSQCPGQMKC CRNGCGKVSC 120
 VTENF

35 Seq ID NO: 503 DNA sequence
 Nucleic Acid Accession #: NM_002407
 Coding sequence: 65..352

40 1 11 21 31 41 51
 CCTCCACAGC AACTTCCTTG ATCCCTGCCA CGCAGACTG AACACAGACA GCAGCCGCCT 60
 CGCCATGAAG CTGCTGATGG TCCTCATGCT GGCAGCCCTC CTCTGCACT GCTATGCAGA 120
 TTCTGGCTGC AAACCTCTGG AGGACATGGT TGAAAAGACC ATCAATTCGG ACATATCTAT 180
 ACCTGAATAC AAGAGCTTTC TTCAAGAGTT CATAGACAGT GATGCCGCTG CAGAGGCTAT 240
 45 GGGGAATTC AAGCAGTGT TTCTCAACCA GTCCATAGA ACTCTGAAAA ACTTTGGACT 300
 GATGATGCAT ACAGTGTACG ACAGCATTTC GTGTAATATG AAGAGTAATT AACTTTACCC 360
 AAGGCGTTTG GCTCAGAGGG CTACAGACTA TGGCCAGAAC TCATCTGTTG ATTGCTAGAA 420
 ACCACTTTTC TTTCTGTGTG TGTCTTTTGA TGTGAAACT GCTAGACAAC TGTGAAACC 480
 TCAATTCAT TTCCATTICA ATAACTAACT GCATATC

50 Seq ID NO: 504 Protein sequence
 Protein Accession #: NP_002398

55 1 11 21 31 41 51
 MKILMVLMLA ALLLHCYADS GCKLLEDMEV KTINSDISIP EYKELLQEFI DSDAAAEAMG 60
 KFKQCFLNQS HRTIKNFGLM MHTVYDSIWC NMKEN

60 Seq ID NO: 505 DNA sequence
 Nucleic Acid Accession #: NM_014791.1
 Coding sequence: 171..2126

65 1 11 21 31 41 51
 TTGGCGGGCG GAAGCGGCCA CNAACCGGCG ATGAAAAGA TTCTTAGGAA CGCCGTACCA 60
 GCGCGCTCTC TCAGGACAGC AGGCCCTGT CCTCTGTGCG GCGCGCGCTC AGCCGTGCCC 120
 TCGCCCTCTC AGGTCTCTTT TCTAATTCCA AATAAATTG CAAGAGGACT ATGAAGATT 180
 ATGATGAATC TCTCAATATG TATGAATTAC ATGAAACTAT TGGGACAGGT GGCCTTGCAA 240
 AGGTCAAACT TGCCCGCCAT ATCTTACTG GAGAGATGGT AGCTATAAAA ATCATGGATA 300
 70 AAAACACACT AGGGAGTGAT TTGCCCGGGA TCAAAACGGA GATTGAGGCC TTGAAGAACC 360
 TGAGACATCA GCATATATGT CACTCTACC ATGTGCTAGA GACAGCCAAC AAAATATTCA 420
 TGGTTCTTGA GTACTGCCCT GGAGGAGAGC TGTTTGACTA TATAATTTCC CAGGATCGCC 480
 TGTGAGAAGA GGAGACCGCG GTTGTCTTCC GTGAGATAGT ATCTGCTGTT GCTTATGTGC 540
 ACAGCCAGCG CATGCTCAC AGGGACCTCA AGCCAGAAAA TTTGCTGTTT GATGAATATC 600
 ATAAATATAA GCTGATTGAC TTTGGTCTCT GTGCAAAACC CAAGGTAAC AAGGATTACC 660
 75 ATCTACAGAC ATGCTGTGGG AGTCTGGCTT ATGCAGCACC TGAGTTAATA CAAGGCCAAT 720
 CATATCTTGG ATCAGAGGCA GATGTTTGGG GCATGGGCAT ACTGTTATAT GTTCTTATGT 780
 GTGGATTCTT ACCATTGTAT GATGATAATG TAATGGCTTT ATACAGAGAG ATTATGAGAG 840
 GAAAATATGA TGTTCACCAAG TGGCTCTCTC CAGTAGCAT TCTGCTTCTT CAACAAATGC 900
 80 TGCAGGTGGA CCCAAGAGAA CGGATTCTTA TGAATAATCT ATGAAACCAT CCTGGATCA 960
 TGCAGATTA CAACTATCTT GTTGAATGGC AAAGCAAGAA TCCTTTTATT CACTTCGATG 1020
 ATGATTGCGT AACAGAATT TCTGTACATC ACAGAAACAA CAGGCACACA ATGGAGGATT 1080
 TAATTTCTAT GTGGCAGTAT GATCACCTCA CGGCTACCTA TCTCTGCTT CTAGCCAGA 1140
 AGGCTCGGGG AAAACCAAGT CGTTAAAGGC TTTCTTCTTT CTCTGTGGA CAAGCCAGTG 1200
 CTACCCCAAT CACAGACATC AAGTCAATA ATTGGAGTCT GGAAGATGTG ACCGCAAGTG 1260

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ATAAAAAATTA TGTGGCGGGA TTAATAGACT ATGATTGGTG TGAAGATGAT TTATCAACAG 1320
GTGCTGCTAC TCCCCGAACA TCACAGITTA CCAAGTACTG GACAGAATCA AATGGGGTGG 1380
AATCTAAATC ATTAATCTCA GCCTTATGCA GAACACCTGC AAATAAATTA AAGAACAAAG 1440
AAAATGTATA TACTCTTAAG AACCAGCATA AGAGAGAAAT ACTCACTACG CCAATCGTT 1500
CAAGAGCTCC AGTTAATAG AACCGCATA AGAGAGAAAT ACTCACTACG CCAATCGTT 1560
ACACTACACC CTCAAAGCT AGAACACAGT GCCTGAAAGA AACTCCAATT AAAATACCAG 1620
TAATTTCAAC AGGAACAGAC AAGTTAATGA CAGGTGTCAT TAGCCCTGAG AGGCGGTGCC 1680
GCTCAGTGGG ATGGGATCTC AACCAAGCAC ATATGGAGGA GACTCCAAA AGAAGGGGAG 1740
CCAAAGTGTT TGGGAGCCTT GAAAGGGGTT TGGATAAGGT TATCACTGTG CTCACAGGA 1800
CCAAAAGGAA GGGTTCTGCC AGAGACGGGC CCAGAGACTT AAAGCTTCAC TATAATGTGA 1860
CTACAACATG ATTAGTGAAT CCAGATCAAC TGTTGAATGA AATAATGTCT ATTCTTCCAA 1920
AGAGCATGT TGACTTTGTA CAAAAGGGTT ATACACTGAA GTGTCAAAAC CAGTCAGATT 1980
TTGGGAAAGT GACAAATGCA TTTGAATTAG AAGTGTGCCA GCTTCAAAA CCCGATGTGG 2040
TTGGTATCAG GAGGCGAGCG CTTAAGGGCG ATGCCCTGGT TTACAAAAGA TTAGTGAAG 2100
ACATCCTATC TAGCTGCAAG GTATAATTGA TGGATTCTTC CATCTGCGG GATGAGTGTG 2160
GGTGTGATAC AGCCTACATA AAGACTGTTA TGATCGCTTT GATTTTAAAG TTCATGTGAA 2220
CTACCAACTT GTTCTTAALG AGCTATCTTA AGACCAATAT CTCTTGTGTT TAAACAAAA 2280
GATATTATTT TGTGTATGAA TCTAAATCAA GCCCATCTGT CATTAATGTTA CTGCTTTTTT 2340
TAATCATGTG GTTTTGTATA TTAATAATTG TTGACTTTCT TAGATTCACT TCCATATGTG 2400
AATGTAGCT CTAACTATG TCTCTTGTGA ATGTGTAATT TCTTCTGAA ATAAAACCAT 2460
TTTGAATAT
  
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Seq ID NO: 506 Protein sequence
Protein Accession #: NP_055606.1

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1 11 21 31 41 51
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MKDYDELLKY YELHETIGTG GFAKVKLACH ILTGEMVAIK IMDKNTLGSD LPRIKTEIEA 60
LKNLRHQHIC QLYHVLEIAN KIFMVLEYCP GGELEDYIIS QDLRSEETR VVFRQIVSAV 120
AYVHQQGYAH RDLKPNLLF DEYHKLKLLD FGLCAKPKGN KDYLQTCOG SLAYAAPHLI 180
QQKSYLGSEA DVVSMGILLY VLAOCFLPFD DNVVMALYKK IMRGKIDVPK WLSPPSILL 240
QQMLQVDPKK RISMKNLLNE FWMQDYNYE VEWQSENPFI HLDDDCVTEL SVHERNNRQT 300
MRDLISLWQY DHLTATYLLL LAKKARGKPV RLRLSSPFCG QASATPFTDI KSNWNLSDIV 360
TASDKNYVAG LIDYDWCEDD LSTGAATPRT SQFTKYWTES NGVESKBLTP ALCRTPANKL 420
KNKENVYTFK SAVKNEEYFM FPEPKTPVVK NQHKREILTT PNRYYTPSKA RNQCLKETPI 480
KLPVNSTGID KLTGTVISPE RRCKSVELDL NQAHMEETPK RKGAKVPGSL ERGLDKVITV 540
LTRSKRKGSA RDGPRRLKLH YNVTTTRLVN PDQLLNEIMS ILPKKHVDFV QKGYTLKQCT 600
QSDFGKVTMQ FELEVQQLQK PDVVGIRBQR LKGDWVYKR LVEDILSSCK V
  
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Seq ID NO: 507 DNA sequence
Nucleic Acid Accession #: NM_000582
Coding sequence: 88..990

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1 11 21 31 41 51
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AACGCGGACC AAGGAAACT CACTACCATG AGAATGCGAG TGATTGCTTT TTGCTCCTTA 120
GGCATCACTT GTGCCATACG AGTTAAACAG GCTGATTCTG GAAGTCTGTA GGAAGAGCAG 180
CTTTACAACA AATACCCAGA TGCTGTGGCC ACATGGCTAA ACCCTGACCC ATCTCAGAAG 240
CAGAATCTCC TAGCCCAACA GACCTTCCA AGTAAGTCCA ACCGAAAGCCA TGACCCATG 300
GATGATATGG ATGATGAAGA TGATGATGAC CATGTGGACA GCGAGGACTC CATGAGCTCG 360
AACGACTCTG ATGATGATGA TGACACTGAT GATTCTCACC AGTCTGATGA GTCTCACCAT 420
TCTGATGAAT CTGATGAACG GGTCACTGAT TTTCCCAAGG ACCTGCCAGC AACCGAAGTT 480
TTCACTCCAG TTGTCCCCAC ASTAGACACA TATGATGGCC GAGGTGATAG TGTGTTTAT 540
GGACTGAGGT CAATATCTAA GAAGTTTGGC AGACCTGACA TCCAGTACCC TGATGCTACA 600
GACGAGGACA TCACCTCACA CATGGAAGAG GAGGAGTTGA ATGGTGCATA CAAGGCCATC 660
CCGTTGCCCC AGGACCTGAA CGCGCCTTCT GATTGGGACA CCGTGGGAA GGACAGTTAT 720
GAAACGAGTC AGCTGGATGA CCAGAGTGCT GAAACCCACA GCCACAAGCA GTCCAGATTA 780
TATAGCGGGA AAGCCATGTA TGAGAGCAAT GAGCATTCGG ATGTGATTGA TAGTCAGGAA 840
CTTTCCAAAG TCAGCGGTGA ATTCCACAGC CATGAATTC ACAGCCATGA AGATATGCTG 900
GTTGTAGACC CCAAAAGTAA GGAAGAAGAT AAACACCTGA AATTTGATAT TTCTCATGAA 960
TTAGATAGTG CATCTTCTGA GGTCAATTAA AAGGAGAAAA AATACAATTT CTCACCTTGC 1020
ATTAGATCAA AAAAAAATG GCTTTATAGC AAATGAAAG AGAACATGAA ATGCTTCTTT 1080
CTCAGTTTAT TGGTTGAAGT TGTATCTATT TGAGTCTGGA AATACTAAT GTGTTTGATA 1140
ATTAGTTTAG TTTGTGGCTT CATGGAAACT CCTGTAAAC TAAAAGCTTC AGGGTTATGT 1200
CTATGTTTAT TCTATAGAAG AAATGCAAAAC TATCACTGTA TTTAATATT TGTATTCTC 1260
TCATGAATAG AAATTTATGT AGAAGCAAAAC AAAATACITT TACCCACTTA AAAAGAGAA 1320
ATAACATTTT ATGTCACTAT AATCTTTTGT TTTTAAAGT AGTGTATATT TTGTGTGAT 1380
TATCTTTTGT TGTGTGAAAT AAATCTTTTA TCTTGAATGT AATAAGAAAT TGGTGTGTC 1440
AATTGCTTAT TTGTTTCTCC ACGGTTGTCC AGCAATTAAT AAACATTAAC CTTTCTTACT 1500
GCTTAAAAAA AAAAAAATA AAAA
  
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Seq ID NO: 508 Protein sequence
Protein Accession #: NP_000573

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1 11 21 31 41 51
| | | | |
MRIAIVICFL LGITCALPVK QADSGSSEK QLYNKYPDAV ATNLNPDPSQ KQNLAPQTL 60
PKSNESHSHR MIMDDDEDD DHVDSQDSID SMDSDVDVDT DSHQSDSHS HSDSDSLVT 120
DFFYDLPLATE VFTFVVPVTD TYDGRGDSVV YGLRSKSKKF RREDIQYFDA TDEDITSHME 180
SBELEGAYKA IPVAQDLNAP SDWDSRGKDS YETSLIDQGS AETHSRKQSR LYKRKANDES 240
NEHSDVIDSQ ELKSVSRFPH SHEFHSHREDM LVVDPKSKKE DKHLKFRISH ELDSASSEVN
  
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Seq ID NO: 509 DNA sequence
Nucleic Acid Accession #: AB051390.1
Coding sequence: 34..2457

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	CTGAGCGCGA	CTCCG3CACT	GCTGGCCCTG	GCGCTGCCCC	TGGCCGCGGC	GCTGGCCCTTC	120
10	TCCGACGAGA	CCCTGGACAA	AGTGCCCAAG	TCAGAGGGCT	ACTGCAGCCG	TATCTCTGCG	180
	GCCGAGGGCA	CGCGGCGGGA	GCGCTACACC	GAGTTCAGCC	TCCGCGTGGG	GGGCGACCCC	240
	GACTTCTACA	AGCCGGGAAC	CAGCTACCGC	GTAACACTTT	CAGCTGCTCC	TCCCTCCTAC	300
	TTCCAGGGAT	TCACATTAAT	TGCCCTCAGA	GAGAACAGAG	AGGGTGATAA	GGAAGAAGAC	360
	CAIGCTGGGA	CCTTCCAGAT	CATAGACGAA	GAAGAAACTC	AGTTTATGAG	CAATTGCCCT	420
	TTTGCACTCA	CTGAAGACAC	TCCACGGAGG	AGGACCGGGA	TCCAGGTGTT	TTGGATAGCA	480
15	CCACCAAGCG	GAACAGGCTG	CGTGATTCTG	AAGGCCAGCA	TCGTACAAAA	ACGCATTATT	540
	TATTTTCAAG	ATGAGGGCTC	TCTGACCAAG	AAACTTTGTG	AACAAGATTC	CACATTGTAT	600
	GGGGTGACTG	ACAAACCCAT	CTTAGACTGC	TGTGCTGCG	GAAGTCCCAA	GTACAGACTC	660
	ACATTTTATG	GGAATTGGTC	CGAGAAGACA	CACCCAAAGG	ATTACCTTCG	TCCGGCCCAAC	720
	CACCTGGTCTG	CGATCATCGG	AGGATCCAC	TCCAAGAAAT	ATGTACTGTG	GGAATATGGA	780
20	GGATATGCGA	CGGAAGGCTT	CAACAAAGTT	GCAGAAATGG	GCTCACCCGT	GAAAATGGAG	840
	GAAGAATTC	GACACAGAG	TGATGAGTTC	CTCACCGTCA	TCAAAGCCAA	AGCCCATGG	900
	CCAGCCTGGC	AGCCTCTCAA	CGTGAGAGCA	GCACCTTCAG	CTGAATTTTC	CGTGGACAGA	960
	ACGCGCCATT	TAATGTCTCT	CCTGACCATG	ATGGGCCCTA	GTCCCGACTG	GAACGTAGGC	1020
	TTATCTGCGA	AAGATCTGTG	CACCAAGGAA	TGTGGCTGGG	TCCAGAGAGT	GGTGCAAGAC	1080
25	CTGATTCCTT	GAACAGGCTG	CCTGACCATG	GGGGTGACCT	ATGAGTCAAC	CACCAAAACC	1140
	ACCATTCCTC	AGGAGAAAT	CGGCCCCCTG	ACCAGCCTGG	ACCATCTCTA	GAGTCTCTTC	1200
	TATGACCCAG	AGGGTGGGTC	CATCACTCAA	GTAGCCAGAG	TGTCTATCGA	GAGAATGCGA	1260
	CGGAAGGGTG	AACAATGCAA	TATTGTACCT	GACAATGTCT	ATGATATTGT	AGCTGACCTG	1320
	GCCTCAGAGG	AGAAAGATGA	AGATGACACC	CCTGAAACCT	GCATCTACTC	CACCTGGTCC	1380
30	CCATGGTTCG	CTGTGAGCTG	CTCACCTGCT	GACAAAGGCA	AGAGGATCCG	ACAGCGCATG	1440
	CTGAAGACAC	AGCTGGAACCT	CAGGTGCCCC	TGCCCTGACA	CCGAGGACTT	CCAGCCCTGC	1500
	ATGGGCCCTG	GCTGCACTGA	CGAAGACGGC	TCCACCTGCA	CCATGTCCGA	GTGGATCAAC	1560
	TGGTCCGCCCT	CTGACATCTC	CTGCGGCATG	GGCATGAGGT	CCCGGGAGAG	GTATGTGAAG	1620
35	CAGTTCCCGG	AGGACGGCTC	CGTGTGCACG	CTGCCCACTG	AGGAACCGGA	GAGGTGCACG	1680
	GTCAACGAGG	AGTGTCTCTC	CAGCAGCTGC	CTGATGACCG	AGTGGGGCGA	GTGGGACGAG	1740
	TGCAGCGCCA	CCTGGGGCAT	GGGCATGAAG	AAGCGGCACC	GCATGATCAA	GATGAACCCC	1800
	GCAGATGGCT	CCATGTGCAA	AGCCGAGACA	TCACAGGCAG	AGAAAGTGCAT	GATGCCAGAG	1860
	TGCCACACCA	TCCCATGCTT	GCTGTCCCCA	TGGTCCGAGT	GGAGTGACTG	CAGCGTGACC	1920
40	TGCCGGGAAG	GCATGCGAAC	CCGACAGCGG	ATGCTCAAGT	CTCTGGCAGA	ACTTGGAGAC	1980
	TGCAATGAGG	ATCTGAGGCA	GCTGGAGAGA	TGCATGCTCC	CTGAATGGCC	CATTGACTGT	2040
	GAGCTCACCG	AGTGGTCCCA	GTGGTCCGAA	TGTAAACAAGT	CATGTGGGAA	AGGCCACGTG	2100
	ATTGGAACCC	GGATGATCCA	AATGGAGCCT	CAGTTTGGAG	GTGCAACCTG	CCGAGAGACT	2160
	GTGCAAGCGAA	AAAAGTBCCG	CATCCGAAAA	TGCTTTGAAA	ATCCATCCAT	CCAAAGCTTA	2220
45	CGCTGGAGGG	AGGCCCGAGA	GAGCCCGCGG	AGTGAGCAGC	TGAAGGAAGA	GTCTGAAGGG	2280
	GAGCAGTTCC	CAGGTGTAG	GATGCGCCCA	TGGACGCGCT	GGTCAGAAATG	CACCAAACTG	2340
	TGCGGAGGTG	GAATTCAGGA	ACGTATACATG	ACTGTAAAGA	AGAGATTCAA	AAGCTCCGAG	2400
	TTTACCAGCT	GCAAGACAAA	GAAGGAGATC	AGAGCATGCA	ATGTTTATCC	TGTGTAGCAA	2460
	GGGTACGAGT	TCCCCAGGGC	TGCATCTTAG	ATTCCAGAGT	CACCAATGGC	TGGATTATTT	2520
50	GCTTGTTTAA	GACAAATTTAA	ATTTGTATCG	CTAGTTTTC	TTTTTGCAGT	GTGGTTCGCC	2580
	CAGTAGTCTT	GTGGATGCGA	GAGACATCCT	TTCTGAATAC	TTCTTGTATG	GTACAGGCTG	2640
	AGTGGGGGCG	CCTCAGCTTC	AGCCAGCCTC	TTCTTGACAG	GGAGTAGTGT	CAGCCACCTT	2700
	GTACTAAGT	GAATGTCGCA	CTCTGGAGC	TTCCACCTGG	CCAGGGAGGA	CGGAGACTTT	2760
	GACCTACTCT	ACATGGAGAG	GCAACCATGT	CTGGAAGTGA	CTATGCTCTG	GTCCCAAGGT	2820
55	CGCGGAGGTA	GGAAACATTC	ACAGATGAAG	ACAGCAGATT	CCCCACATTC	TCATCTTTGG	2880
	CCTGTTCAAT	GAACCAATTG	TTTGCCCATC	TCCTCTTAGT	GGAACTTTAG	GTCTCTTTTC	2940
	AAGTCTCTCT	AGTCATCAAT	AGTTCTCTGG	GAATAACAGA	GTCTGGTAGAC	TTGAAGAGGA	3000
	GCATGTATGT	TGGGTGGCTT	TTTCTCTTTC	ACTGAGAAAT	TCCGAATACA	TTTGTCTCAC	3060
	CCCTGATATT	GGTTCCTGAT	GGCCCCCACA	CAAAATATAA	TAAATTAATT	ATGGCTGCTT	3120
60	TATTTAATTA	TAAGGTAGCT	AGTTTITACA	CCTGAGATAA	ATAATAAGCT	TAGAGTGTAT	3180
	TTTTCCCGTG	CTTTTGGGGG	TTCCAGAGAG	TATGTACCAAT	TCCTCTGGGA	AGCCAGCCTT	3240
	CTGAACCTTT	TGGTACTAAA	TCCCTATTGG	AACCAAGACA	AAGGAAGCAA	AATTGGTCTC	3300
	TTTAGAGACC	AATTGTGCTA	AATTTTAAAA	TCTTCTTACA	CACATCTAGA	CGTCAAGTT	3360
	TGCAATCAG	TTTTTAGCAA	GAACACATTT	TGTCTATACA	AACATTTTGC	TAGTCTGCC	3420
65	CAAGCCCCC	CCAATGCATT	CCTTCACAAA	AATACAATCT	CTGTACTTTA	AAGTTATTTT	3480
	AGTCATGAAA	TTTTATATGC	AGAGAGAAAA	AGTTACCGAG	ACAGAAAAACA	AATCTAAGGG	3540
	AAAGGAATAT	TATGGGATTA	AGCTAGACAA	GCAATCTCTG	TGGAAGTICA	AACCTGTCCG	3600
	TGCTCCACAC	CAGGCTGTG	GTCTCCGAG	ACATGCATAG	GAATGGGCCAC	AGGTTTACAC	3660
	TGCCCTCCCA	GCAATTATAA	GCACACGAGA	TTCCAGGGAGA	CTGACCCACA	AGGATAGTGT	3720
70	TAAAGGACA	TTTTCTCAGT	TGGGTCCATC	AGCAGTTTTT	CTTCTCTCAT	TTATTGTTGA	3780
	AAACTATTGT	TTCAATTTCT	CTTTTATAGG	CCTTATTACT	GCTTAATCCA	AATGTGTACC	3840
	ATTGGTGAGA	CACATACAAT	GCTCTGAATA	CACATCGAAT	TTGTATTAAA	CACATCAGAA	3900
	TATTTCCAAA	TACAACATAG	TATAGTCTCT	AATATGTACT	TTTAACACAA	GAGAGACTAT	3960
	TCAATAAAA	CCTACTGGGT	CTTCTAGTGC	TTTAGCTTAA	GTAAGTGTTC	AGTAGGTTC	4020
75	TTTTTATATT	GTCTCTCCAC	TCCATCATTT	TCAATAAAAG	ATAGGGCTTT	TGCTCCCTTG	4080
	TTCTGGAGG	GACCATATT	ACATCTCIGA	ACTACCTTTG	TATCCAACAT	GTTTTAAATC	4140
	CTTAATGAAA	TTGCTTTCTC	CCAAAAAAGG	CACAAATATA	AGAAACACAA	GATTTAATTA	4200
	TTTCTTACT	TGGGGGGAAA	AAAGTCTCTCA	TGTAGAAGCA	CCCACTTTTG	CAATGTTGTT	4260
	CTAAGCTATC	TATCTAATCT	TCAGCCCATG	ATAAAGTTCC	TTAAGCTGGT	GATTCCCTAAT	4320
80	CAAGGACAG	CCACCTCATG	GTCTCATGTT	TGTATTGGT	CCAGTTGGG	TACATTTTAA	4380
	AATCCTGATT	TGGGACACTT	AAAACAGGTT	TAATGGCTAA	GAATGGGTAA	CATGACTCTT	4440
	GTGGGATTGT	TATTTTGTGT	TTTCAATGGG	GAATTTATTA	GAAGCATCAA	GTCTCTTTCT	4500
	TACCAAGTCT	TGTGTAGGTG	GTTTATAGTT	CTTTTGGCTA	ACAAATCATT	TTGGAATATA	4560
	AGATTTTITA	CTACAAAAAT	G				

Seq ID NO: 510 Protein sequence
Protein Accession #: BAB18461.1

5 1 11 21 31 41 51
MRLSPAPLKL SRTPALALLA LPLAALAFS DETLDKVPKS EGYCSRILRA QGTTRREGYTE 60
FSLRVEGDDP FYKRGTSYRV TLSAAPPSTYF RGFTLLIALRE NREGDKKEDH AGTFQIIDEH 120
ETQFMNSCPV AVTESTPRRR TRIQVFWIAP PAGTGCVILK ASIVQKRITY PQDEBSLTKK 180
10 LCEQDSTFDG VTDKPIILDCC AGGTAKYRLT FYGNWSEKTH PKDYPRRANH WSAIIGSSHS 240
KNYVLWEYGG YASEGVKQVA ELGSPVKMEE EIRQQSDEVL TVIKAKAQWP AWQPLNVRAA 300
PSAEPSVDRT RHLMSFLTMM GPSPDWNVGL SAEDLCTKSC GMVQKVVDL IPWDAGTDSG 360
VLYSSPNKPT IPQEKIRFLT SLDEPQSPFY DEEGSITQV ARVVIERIAR KGEQCNIVPD 420
NVDDIVADLA PEEKDEDDTP ETCIYSNWSF WSACSSSTCD KGRMRQRM KQQLDLSPVC 480
15 PDTQDFQPCP GPFCSDSDGS TCTMSEWITW SPCSI8CGMG MRSRERYVKQ FPEDGSVCTL 540
PTEETEKCTV NEBCSPSSCL MTENGWDEC SATCGMGNKK RHRMIRWNP A DGSMDCAETS 600
QAEKCMPEEC HTIFCLLSPW SEWSDCSVTC KGMRTQRQM LKSLAELGDC NEDLEQVEKC 660
MLPECPIDCE LTENSQWSEC NKSCKGKHVI RTRMIQMEPQ FGGAPCFETV QRKKCRIRKC 720
LWNPISQIKLR WRBARERRRS EQLKEEESGB QTPGCRMRPW TANSECTKLC GGGIERYMT 780
VKRFRKSSQF TSCDKKKEIR ACNVHPC

Seq ID NO: 511 DNA sequence
Nucleic Acid Accession #: NM_003108.1
Coding sequence: 76..1401

25 1 11 21 31 41 51
GGGGTGGGAG GGGGAGGGGG ACCTCGGCAC GAGACCCAGC GGCCCGGGTT GGAGCGTCCA 60
GCCCTGCAAC GGATCATGGT GCAGCAGGCG GAGAGCTTGG AAGCGGAGAG CAACCTGCCC 120
CGGGAGGGCG TGGACACGGA GGAGGGCGAA TTCATGGCTT GCAGCCCGGT GCCCTTGGAC 180
GAGAGCGACG CAGACTGGTG CAAGACGGCG TCGGGCCACA TCAAGCGGCC GATGAACGCG 240
TTCATGGTAT GTCCCAAGAT CGAACGCGAG AAGATCATGG AGCAGTCTCC GGACATGCAC 300
AAGCGCGAGA TCTCCAGAG GCTGGGCAAG CGCTGGAATA TGCTGAAGGA CAGCGAGAAG 360
ATCCCTGTTA TCCGGGAGGC GGAGCGGCTG CGGCTCAAGC ACATGGCGGA CTACCCCGAC 420
TACAAGTACC GCCGCCCGAA AAGGCCCAAA ATGGACCCCT CGGCCAAGCC CAGCGCCAGC 480
CAGAGCCGAG AGAAGAGGCG GGCGCGGGCG GCGCGCGGGA GCGCGGGCGG AGCGCGGGGC 540
GGTGCCAGA CTTCCAGAGG CTCGAGCAAG AATAGCGGCA AGCTCAAGGC CCGCGCGGCC 600
GCCGCGCCCA AGCGCGGGCG GCGCAGGCGG GCCCAGTCCG GGGACTACGG GGGCGCGGGC 660
GACGACTAGC TGCTGGGCGG CCTGCGCGTG AGCGGCTCGG GCGCGCGCGG CGCGGGCAAG 720
40 ACBGTCAAGT GCGTGTCTCT GGATGAGGAC GACGACGAGC ACGACGAGGA CGAGGAGCTG 780
CAGCTGCGAG TCAACAGGGA GCGCGGAGAG GAGGAGGAGG AACCAACCGA CCGAGAGCTC 840
CTGCGCGCGC CGGGCGGAGG GCGGTCGAG CTGCTGAGAC GCTACAAAGT CGCGCAAGTG 900
CCGCGCAGCC CTACGCTGAG CAGCTCGGCG GAGTCCCGCG AGGGAGCGAG CCTCTACGAC 960
BAGGTGCGGG CGGGCGCGAC CTCGGGCGCC GGGGGCGGCA GCGGCTCTA CTACAGCTTC 1020
45 AAGAACATCA CGAGAGTCAG CCGCGCGCGG CTCGCGCAGC CGCGGCTGTC GCGCGCTCC 1080
TCCGCTCGG TGTCAACCTC CTCGTCGAGC AGCAGCGGCA GCAGCAGCGG CAGCAGCGGC 1140
GAGGAGCGCG AGGACCTGAT GTTGCACCTG AGCTTGAATT TCTCTCAAG CGCGCAAGTG 1200
GCCAGCGAGC AGCAGCTGGG GGGCGCGCGG GCGGCGCGGA ACCTGTCCCT GTGCTGGTG 1260
GATAAGGATT TGGATTCGTT CAGCGAGGCG AGCCTGGGCT CCCACTTCCA GTTCCCGGAC 1320
50 TACTGCAAGC CGAGAGCTGAG CGAGAGTATC CGCGGGGACT GCTGAGGAGC GAACCTCTCC 1380
GACCTGCTGT TCACATATTG AAGGCGCGCC GCTGCTCGCT CTTTCTCTCG GAGGGTGCAG 1440
AGCTGGGTTT CTTGGGAGGA AGTTGTAGTG GTGATGATGA TGATGATGAT AATGATGATG 1500
ATGATGCTGG TGTGTATGTT GCGGCTGGTA GGGTGGAGGG GAGAGAAGAA GATGCTGATG 1560
ATATTGATGA GATGTGCTGA CGCAAGAAAT TTGGAARACA TGATGAAAT TTTGGTGGAG 1620
55 TTAAGAGTAA ATGAGTAGTT TTTAAGCATT TTTCTGTGCC TTTTGTGTC CCGCTTCCCT 1680
TCCTTTATCG TGTCTCAAGG TAGTTGCATA CCTAGTCTCG AGTTGTGATT AATTTCCCAA 1740
AAAATGTTT TTTGTAAATTA CTATTCTTIT TTCCTGAAAT TCGTGATTGC AACAAAGGCA 1800
GAGGGGGCGG CGCGGGCGGAG GGGAGGTAGG ACCCGCTCCG GAAGGCGCTG TTTGAAGCTT 1860
60 GTCGCTCTTT GAAGTCTGGA AGACGCTGCG AGAGGACCCCT TTTGGCAGCA CAACGTGTAC 1920
TCTAGGGAGT TGGTGGAGAT ATTTTITTTT CTTAAGAGAA CTTAAGAAC TGGTGATTTT 1980
TTTTTAACAA AAAAAAGG

Seq ID NO: 512 Protein sequence
Protein Accession #: NP_003099.1

65 1 11 21 31 41 51
MVQQAESLEA ESNLPERALD TENGEMACS PVALDESDFD WCKTAGSHIK RYMNAFMVWS 60
KIERRKIMEQ SPDMENAEIS KRLGKRWKML KDSKIPFIR BAERLRLLKH ADYDPYKYRP 120
70 RKKPKMDPSA KPSASQSPFK SAAGGGGSSA GGGAGGAKTS KGSBKCKGL KAPAAAGAKA 180
GAGKAAQSGD YGGAGDDYVL GSLRVSGSGG GAGGATVKCV FLDEDDDDDD DDELQLQIK 240
QEPDEDEEP FHQQLLPFG QPQLLRRY NVAKVPASPT LSSASPSPEG ASLYDEVRA 300
ATSGAGGGGR LYYEFKMITK QHPPLAQA LSPASSRSVS TS9SSSSGSS SSSSGEDADD 360
75 LMFPLSLNFS QSAHSA9RQ LGGGAAAGNL SISLVDKDLD SPSEGSLSGR FEPFDYCTPE 420
LSEMIAGDWL BANFSDLVFT Y

Seq ID NO: 513 DNA sequence
Nucleic Acid Accession #: CAT Cluster

80 1 11 21 31 41 51
GGTCGACCTA AATCTGATAA CTGGCTTATT ATGTAATTTA TTGGTGTAT TATAGTAGAG 60
ATTGGTAATC TACAGTAAGA TTTTCAGTTA GGATTTGAGA TTATGATAAT AACTAATAGA 120
ATATTCTCAA ATTGGAATTA GAAGATTGTT GTATGACAGA GAGTCAGGAC TTGCCATTG 180

5 GCAAAACATCA AAGTCATTGT TTGGTGTGTA ATAGTACAAA ATCATCTTGC TTAACAGAGA 240
 AAGGATATCT GTTGTCTCCG AATGAAACAA TTTTCTGAA ATAGAGGGCC CAGAATTGGT 300
 CTCTGACAAAT TAATAAGAC ATCAAGATA GCAAAATGAT TTTTATATCT TAGGGCCAAAT 360
 ACTACCAATT TAATANTTAA ACAAGTCT GTGAGCTCT GAACCTTGGCA GAATGGTGG 420
 CAACATAGAC TTGGATTCTT CCAAAATCCC CACATAAAAC AAAGGGGATC AACTAGATAG 480
 AAAAACCAGA AACCTTTGGA AATATCTGTT TAAAAAATA AAAAAGTCGA CGCGGGCC

Seq ID NO: 514 DNA sequence

Nucleic Acid Accession #: CAT cluster

10 1 11 21 31 41 51
 15 GGAGCCACAG TGAAGTCTCA GAATGTCAST GATTCCACAT TTAATATCTA CATTTTTCGA 60
 GGGCAGTAC TCTTTTGTAG TATAACATIG AGCTGATAGC ACATAGTGTG GACAAGTGAA 120
 TACAGGATTC TCTGGGTTGT ATTCCAGAA GTCTGGAGGT CATTTGGATA TTGTGGGCC 180
 CTGGCTTCA CTCTGACTTG TGTGACACAT AAAAATTGTG ATGAAATGTC CTATAGATGT 240
 CCTGCAGGTC TTAAGAAGAC CTTTCCAAAC TATGAAACAG CCCAGCAGCA CTGAGTTAGA 300
 20 GGTAATTTCT GAACCCCTGA ACCTAATAAC TATTTCTAAT GCACATAGAA TTGGCAAGTA 360
 GCATTCTATG TCTATGAACA GTATGCTTTT TCTATATAAC AGAGAAAATC TTTTAAAGCA 420
 AACTACTCAG TTTAAACCTT AATCTCTCTC ATAATCTCAG TACTTTTGAA TGAGACATA 480
 TCAATGCAAC AGTACACTCT TATTCAGGCA TTTGAAAGAA AGAATTCGAG ATCTAGTTTG 540
 TATCAGATAT TATAAATTAG TATGGTTTAT TCTTTGTCTT GAAATCTTAC TTAATTTTIG 600
 25 GACTATAGGT TTAAGAAATG AAGCAGAGT TCTGCACCAA TCAGAAATAG CTACATTATG 660
 CTTGAGTGAC AACTACTGTA ATGACAAAT ATCAGTGGCT TAATACATG GTTTTCTCT 720
 CATACTGTTT CATTAAGAGT CAGCAAGGAC CCTGCTCATT ATGGTCCCTC AGGACCCAG 780
 GGTGTGTGGA AGTCCACCA TTTAGATAG CTCCCTTCAA AGTCAGCCAT CTTTGGCAGT 840
 CCAATGCCCC CACAGGCTG GCAAAATTG GCTCTGGATG GCTTCAAGGA TTGAGCATCG 900
 30 GGCAGTTTAA ATGCTTTCAA CATGGAAGT GGACACCGGC CACTCCCACT CACATCCCTT 960
 GGGCCAGAAC TAGGTCACTG GGGCCGGACC TAACCTCGGA GGGTGGGGA ATTGTAATTC 1020
 CTCATGTATC CCAAGTGGGA GAGAAGCCAG ATACTGAGAA ACATCAATAA TGGCTAACAG 1080
 AAATCCATTG TACCATTTCC TTTGCTTAAA GTGAAAAGAT GAGTACTTTC ATCAATTGT 1140
 AAATCTTACT TTTGAAGTAA ATCTGGTAG CTGTCATGGG GGTCTGGATT CAGAAAGCC 1200
 35 ATATGTAAAT TGGGAATGAC ATTCACTTAA GCTCATAGAA TATCATTATT TGATGTAAA 1260
 TGCCCTCAT TGCATATCAG GACCAAAATG CACTAACCCAC AAAACCCCCC TCCCCAGGG 1320
 GCGCCGGGTC CCAATTCCCC TCATCTCCCT TAAATGAGGC ATTCTATGAT TTGGAATGGA 1380
 AGCCAGATTG TACTCTTAAG AATTTTACTT AATTCAGGAA TTATCTCAC TGAATATGT 1440
 CCAGTCTGGA AAGGAATGCA AAGTCAAAAT TTGCATCTTC TTTGCTCAAG GGCCTTTAGA 1500
 40 TGTAACAACA CAGCATGAT ACAGGCTGA CAATGACATT ATGATTAAA TATGTTAAAC 1560
 AACTTATTA ATGTGATATC AAAAAAAT TATGTTCTTT ATTTATGGT TTGCAATAGT 1620
 CCGACTCAG TGCATACATA CCGCTCTTGT TCCTCAGTTC TTATCCCTGA TTTCTTACAG 1680
 GATGGCTTAA GACAGCTGTA GATGTTTTA TTAGCAAAA AAAAAAATA AAAAGTCGAC 1740
 GCGGCCGGA ATTTAGTAG

Seq ID NO: 515 DNA sequence

Nucleic Acid Accession #: NM_012427

Coding sequence: 41..924

50 1 11 21 31 41 51
 55 CTTGTGTTTC CTCTCTACTT GGGGAATCA GTTGCAGCG CCATGGCTAC AGCAAGACCC 60
 CCGTGGATGT GGGTCTCTGT TGTCTGTATC ACAGCCCTGC TTCTGGGGGT CACAGAGCAT 120
 GTTCTCGCCA ACAAGATGAT TTCTGTGAC CACCCCTCTA ACACCGTGCC CTCTGGGAGC 180
 AACCAGGACC TGGAGCTGCG GGCCTGGGAA GACGCGCGGT CGGATGACAG CAGCAGCCGC 240
 ATCATCAATG GATCCGACTG GATATGACAC ACCCAGCCGT GGCAGGCCGC GCTGTTGCTA 300
 AGGCCCAACC AGCTCTACTG CCGGGCGGGT TTGGTGCATC CACAGTGGCT GCTCAGGGCC 360
 GCGCACTGCA GAGAAAGAT TTTAGAGTTC CGTCTGGGCC ACTACTCCCT GTCACCAATT 420
 TATGAATCTG GGCAGCAGAT GTTCCAGGGG GTCAATCCA TCCCCACCC TGGCTACTCC 480
 60 CACCCCTGGC ACTCTAAGA CCTCATGCTC ATCAAACTGA ACAGAAAGAT TCGTCCCACT 540
 AAAGATGTCA GACCATCAA GGTCTCTCTT CATTTGCCCT CTGCTGGGAC AAAGTGGCTG 600
 GTGTCTGGCT GGGGACAAAC CAAGAGCCCC CAAGTGCACT TCCCTAAGGT CCTCCAGTGC 660
 TTGAATATCA GCGTCTAAG TCAGAAAAGG TGGAGGATG CTTACCCGAG ACAGATAGAT 720
 GACACCATGT TCTGACCGGG TGACAAAGCA GGTAGAGACT CTTGCCAGGG TGATTCGGG 780
 65 GGGCCTGTGG TCTGCAATGG CTCCCTGCAG GGACTCTGTG CCGTGGGAGA TTACCTTTGT 840
 GCGCGGCCCA ACAGACCGGG TGTCTACAGC AACCTCTGCA AGTTCACCAA GTGGATCCAG 900
 GAAACCATCC AGGCCAATCT CTGAGTCTATC CCAGGACTCA GCACACGGC ATCCCCACT 960
 GCTGCAGGGA CAGGCTGAC ACTCTTTTCA GACCTCTATT CCTTCCAGA GATGTTGAGA 1020
 ATGTTCTAT CTCCAGCCCC TGACCCCATG TCTCTGGAC TCAGGGTCTG CTTCGCCAC 1080
 70 ATTGGGCTGA CCGTGTCTCT CTAGTTGAAC CTTGGGAACA ATTTCCAAA CAGTCCAGGG 1140
 CGGGGGTTC GTCTCAATCT CCGTGGGACA CTTTCTCCT CAAGCTCAGG GCGCATCCCT 1200
 TCTCTGACG TCTGACCCAA ATTTAGTCCC AGAAATAAAC TGAGAAGTGG AAAAAAATA

Seq ID NO: 516 Protein sequence

Protein Accession #: NP_036559

75 1 11 21 31 41 51
 80 NATARPPNWM VLCAITALL LGVTEHVLAN NDVSCDHPSN TVPSGSNQDL GAGAGEDARS 60
 DSSSRING SDGMFTQW QAALLLRNQ LYCGAVLVRP QWLLTAHCR KXVFRVLGH 120
 YSLSPVYBSG QQMFQGVKSI PRPGYSEPHG SMDLMLIKLN RRIKPTKIDR PINVSHCPK 180
 AGTKCLVSGW GTTKSPQVHF PKVLQCLNIS VLSQKRCEDA YFRQIDTDMF CAGDKAGRDS 240
 CQDGGGPPV CNGSLQLVLS WGDYFCARPN RGVYTNLCK FTRWIOBTIQ ANS

Seq ID NO: 517 DNA sequence
Nucleic Acid Accession #: NM_001719
Coding sequence: 123..1418

5	1	11	21	31	41	51	
	GGGCGCAGCG	GGGCCCGTCT	GCAGCAAGTG	ACCGACGGCC	GGGACGGCCG	CCTGCCCCCT	60
	CTGCCACCTG	GGGCGGTGGG	GGCCCCGAGC	CCGAGGCCCC	GGTAGGCGGT	AGAGCCGGCG	120
	CGATGCACTG	GCGCTCACTG	CGAGCTTCGG	CGCCGCACAG	CTTCGTGGCG	CTCTGGCCAC	180
10	CCCTGTTCT	GCTGGCTCC	GCCTCGGCG	ACTTCAGCTT	GGACAACGAG	GTCGACTCGA	240
	GCTTCACTG	CCGCGCGCTC	CGCAGCCAGG	AGCGCCGGGA	GATGCGACGC	GAGATCTCT	300
	CCATTITGG	CTTGCCCCAC	CGCCCGCGCC	CGCAGCTCCA	GGGCAAGCAG	AACTCGGCGC	360
	CCATGTTTAT	GCTGGACCTG	TACAACGCCA	TGGCGGTGGA	GGAGGGCGGC	GGGCCCGGCG	420
	GCGAGGCTT	CTGCTCAGCC	TACAAGGCGG	TCTTCAGTAC	CGGCGGCCCT	CTCTGGGCCA	480
15	GCTTCGAA	TAGCCATTTC	CTCAGCGGCG	CCBACATGGT	CATGAGCTTC	GTCACCTTGG	540
	TGGAAACATG	CAAGGAATTTC	TTCACCCAC	GCTACCCACA	TCGAGAGTTC	CGGTTTGATC	600
	TTTCTAAGAT	CCGGAAGGG	AAGCTGTCTA	CGCGAGCCGA	ATTCCGGATC	TACAAGGACT	660
	ACATCCGGGA	ACGCTTCGAC	AATGAGACGT	TCCGGATCAG	CGTTTATCAG	GTGCTCCAGG	720
	AGCACTTGG	CAGGGAATCG	GATCTCTTCC	TGCTCGACAG	CCGTACCTCT	TGGGCTCCGG	780
20	AGGAGGGCTG	GCTGGTGTTC	GACATCACAG	CACCCAGGAC	CCACTGGGTG	GTCATCTCCG	840
	GGCAACACTG	GGGCTCTCAG	CTTCCGTTGG	AGACGCTGGA	TGGCGGCGAG	ATCAACCCCA	900
	AGTTTCCGGG	CCTGATTTGG	CGCCACGGCG	CCCAACAACA	CGAGCCCTTC	ATGGTGGCTT	960
	TCTTCAAGGC	CACGAGGATC	CACCTCCGCA	CACGCGGTC	CGAGGGGAGC	AACAGAGCGA	1020
	CCCAAGAACG	CTCCAAAGAG	CCCAAGAAC	AGGAGGCCCT	CGGGATGGCC	AACTGTGGCAG	1080
25	AGAACGCGAG	CAGCGACCGAG	AGGCAAGGCT	GTGAAGAGCA	CGAGCTGTAT	GTCACTCTCC	1140
	GAGACCTGGG	CTGGCAGGAC	TGGATCATCG	CGCCTGAAGG	CTACGCGGCC	TACTACTGTG	1200
	AGGGGGAGTG	TGCCCTCCCT	CTGAACCTCT	ACATGAAGCG	CACCAACCTC	GCCATCGTGG	1260
	AGACCTCTGGT	CCACTTCACT	AACCCGGAAA	CGTGCCCAAA	GCCCTCTGTT	GGGCCACGCG	1320
	AGCTCAATCT	CATCTCCGCT	CTCTACTTCT	ATGACAGGCA	CAACGTCATC	CTGAGGAAT	1380
30	ACAGAAATGC	GGTGGTCCGG	GCGCTTGGCT	GCCACTAGCT	CCTCCGAGAT	TTCAAGCCCT	1440
	TTGGGGCCAA	GTTTTTCTGG	ATCCTCCATT	GCTCGGCTTG	GCCAGGAACC	AGCAGACCAA	1500
	CTGCCCTTTG	TGAGACCTTC	CCCTCCCTAT	CCCCAATTT	AAAGGTGTGA	GAGTATTAGG	1560
	AAACATATGG	AGCATATGTC	TTTTGATCAG	TTTTTCATGG	CGAGCATCCA	ATGACAACGA	1620
	TCTTCAACAG	TGTGCAGGCA	AAACCTGATC	AGGAATAAAA	ACACCGGATA	AGAAATAATG	1680
35	GCGGGGCGAG	GTCATTGGCT	GGGAGTCTC	AGGCATGCAC	GGACTCGTTT	CCNAGAGTAA	1740
	TTATGAGGCG	CTACCAGCCA	GGCCACCCAG	CCGTGGGAGG	AAGGGGGCGT	GGCAAGGGGT	1800
	GGGCATATGT	GTGTCGTGTG	GAAAGGAAAA	TTGACCCGGA	AGTTCCTGTA	ATAAATGTCA	1860
	CAATAAACCG	AATGAATG					

40 Seq ID NO: 518 Protein sequence
Protein Accession #: NP_001710

	1	11	21	31	41	51	
45	MEVSELEAAA	PHSFVALWAP	LFLILRSALAD	FSLDNEVHSS	FIERRLRSSQE	RREMQRREILS	60
	LGLGPHRRPR	HLQGHKNSAP	MPMLDLNYAM	AVEEGGGPGG	QGFSYPPYKAP	FSTQGGPLLAS	120
	LDQSEFTIDA	DMVMSFVNIV	BHKSFEFFHR	YHHERFRFDL	SKIPEGAVT	AAERFIYKDY	180
	IRERFDNETP	RISVYQVLQE	HLGRESDFL	LDSERTLWASE	EGWLVFDITA	TSMHWVWNER	240
50	HNGLQLSLSE	TLDGQSINKP	LAGLIGHGHP	QNKQPFMVAF	EKATEVDFHS	IRSTGSKQRS	300
	QNRSTFRPQG	EARLMANVAE	NSSSDQRAQ	KKHELVSFR	DLKGVWILIA	PEGYAAYYCE	360
	GECAPFLNSY	MMATNHAIVQ	TLVHFINEET	VPEKCCAPTO	LNATSVLYFD	DSSNVILKKY	420
	ENMVVRACBG	H					

55 Seq ID NO: 519 DNA sequence
Nucleic Acid Accession #: Eos sequence
Coding sequence: 264..782

	1	11	21	31	41	51	
60	CCTGCTCCA	GTCACACCGG	GAAGCTGACT	GGTCCACGCA	CAGCTGAAGC	ATGAGGAAAC	60
	TCATCTCGGG	ACTAATTTC	CTTAAAGATT	AGACTTGCAC	AGTAGGACT	TCAACTGAOC	120
	TTCTCAGAC	TGAGCACTGT	TTCCAGTATA	TACATCAAGT	CATCAGACTG	TCCAGCACCC	180
	TGCCCCGTGC	ACTACTGAGA	GACGAGCTGC	CAGGGTGGTT	CCTGAAAGTT	CCTGAGCCCC	240
	AACTTATCAC	C AAGGAGCTC	ATCATGCTGA	CAGAAGTCAT	GGAGGCTCTG	CATGGCTTAG	300
65	TGATCGCGGT	GGTGTCCTTC	TTCTCTCAGG	CTGTGTTCTG	CACCGGCATC	AACTACTCTG	360
	TCAGCAGGCA	CATGGCCAC	AAGATGATCA	AGATACTGAA	AGCGGCCAGT	CTCCAGGTTG	420
	CCAGGCCGAG	CTCTGGCCAC	CATCATCCAC	CTGCTGTCTA	AGAGATTGAG	GAGACTCAGA	480
	CAGAGAGAGA	CATCCCAATG	TCTGATCCCC	TTTACAGGCA	TGACAGCGAC	ACACCCCTAG	540
	ATAGCTTGGA	TAGCTCTGTC	ATGTGSCCTC	CTGCTTGCCA	GGCCACAGAC	GATCTGGATT	600
70	ACACACAAGT	CGTCTTTTCT	GACCCCTGGG	AACTAAAAAA	TGACTCCCGG	CTGGACTATG	660
	AGACATCAA	GGAAATCACA	GATTATGTCA	ATGTCAATCC	AGAAAGACAC	AAGCCCGATT	720
	TCGGGTATTT	TGTCAAACCC	GCTCTGTCIG	AGCCAGCGGA	ATATGATCAA	GTGGCCATGT	780
	GAAATTCCAA	TTTTTTTAA	GGGGTCCAGT	TCCTATGGA	TTCTTACATT	TAAATTTGAT	840
	GGAAATGCCA	TTTTCGCCCC	TTAAACAGGG	CTGGGGGCTC	ACAGGCTCAT	GGAGCAGGCG	900
75	CAAAAGAAAT	GTTGCGAAGA	AAACTGTATA	ATACACAGAG	GTCTCTACGA	CCCATGGACT	960
	CTGTGTCGT	AGCCAAAAAA	CTGTGTCGTT	CTCAAAAAAC	AAAAACAAGG	CTTGCTGGGG	1020
	AAAAACGGCC	AATGCCCCGG	CAAGAAAGTT	TGAGATCAGA	TGTTAGGAGG	AACTTTCAGG	1080
	TAAAGTATGA	GAACTATGGA	GTCCTATGCG	AGAGATAGTA	AGTGAGTCTC	TCCCCAGGGA	1140
	AAATTTTAAA	AGAGTTGAAT	CAGCTCTGAT	AGAGTTCTAT	TGCGCAATCT	CATGTTTAAA	1200
80	TGACTCTCCT	TTGAGCTCTT	TAATTATTGG	CAATAAACAA	CTTCTTTAAA	AGTTTTAAAT	1260
	AAATATGCAA	CCACACCA					

Seq ID NO: 520 Protein sequence
Protein Accession #: Eos sequence

1 11 21 31 41 51
 5 MLTEVMEVWH GLVIAVVSFL LQACFLTAIN YLLSRHMAEK SEQILKAASL QVPRPSPGHH 60
 HPPAVKEMKE TQTERDIPMS DGLYRHDSDT PSDSLDSSCS SPPACQATED VDYTQVVFSD 120
 PGELKND52L DYENIKRITD YVNVNPERHK PSFWYFVNPA LSEPAEYDQV AM

Seq ID NO: 521 DNA sequence

Nucleic Acid Accession #: Bos sequence

Coding sequence: 107..328

1 11 21 31 41 51
 15 CTGCTCTGTC TGAGCCACGCG GAATATGATC AAGTGGCCAT GTGAATCCCA AATATTTTAA 60
 ATGGGGTCCA GTTCTCTATG GATTCTTACA TTAAATTTGT AGGGAATGCG CATTTTTCOC 120
 CCTTAACCAA GGCATGGGGC TCACAAGTCT ATGGAGACAG GCCAAAAGA ATGTGGAGAA 180
 GAAAACTGAT AAATACACAG AGGTCTCTCA GACCCATGGA CTCTGTGTCT GTACCCAAAA 240
 AAGCTGTTCC TTCTCTAAAA ACAAAACAA GGCTTGGCTG GGAACACAGG CCAATGCCCC 300
 GGCAAGAAAG GTTGAGATCA GATGTTAGGA AGAAGTTTCA GGTAAAGTAT GAGAAGTATG 360
 20 GAGTCCATCA GCAGAGATAG TAGTGAAGTC TCTCCCCAGG GAAATTTTAA AAAAGGTTGA 420
 ATCAGCTGTT GTAGAGTTCT ATTGGCAAT CTCATGGTTA AATGACTTCC CTTTGAGCTC 480
 TTTAATATT GGCATAAAC AACTTCTTTA AAAGTTTAA ATAAATAGC AACCAACCAC 540
 A

Seq ID NO: 522 Protein sequence

Protein Accession #: Bos sequence

1 11 21 31 41 51
 30 MPFFPLKQGM GLTSLWRQAK KNVEKKTDKY TEVLKTHGLL VCTQKSCSFL KNKNKAWLQK 60
 QANAPARKVE IRC

Seq ID NO: 523 DNA sequence

Nucleic Acid Accession #: Bos sequence

Coding sequence: 211..1895

1 11 21 31 41 51
 40 GGATCTGAGG GGCBCCCAGT CACTTCTTCC ACCTTCTGCT GCTGGGCGGG AGGAGCGGAT 60
 GGGGCTTGGG AGGCAGCCTG CTCTCCAGTC CCTATCCACC CACAGGTTTT TTGGGTGCGA 120
 GAGGAATTAT CTGATAAAAT TCCTGGGTTA ATATTTTAA AAACGGAGAG TTTTAAAAA 180
 TGAATTTTTT CCCTCGAAAA TGACCTTTTT ATGCTTGGAA GCAGTTTGTG AACACAGATA 240
 GTGCTTTTTT TTTTCTCTTC TTTTCTACG ATAAATGAAA GCATTTCTTC AAGAAAAAGG 300
 CACAGGTTCG TTGAACAGCT GGATTCGAT GGCACCATTA CTATAGAGGA GCAGATTGTC 360
 45 CTGTGTCTGA AAGCGAAGT ACAATGTGAA CTCAACATCA CAGCTCAACT CCAGAGAGGA 420
 GAGGTAATT GTTCTCCCGA ATGGGATGGA CTCATTGTGT GGGCCAGAGG AACAGTGGGG 480
 AAAAATACGG CTGTGGGGGT CCCTCCCTAT ATTATGACT TCAACCATAA AGGAGTTGCT 540
 TTCCGACACT GTAACCCCAA TGGACATGG GATTTATGTC ACAGCTTAAA TAAACATGCG 600
 GCCAATTATT CAGACCTGCC TCGCTTTCTG CAGCCAGATA TCAGCATAGG AAAGCAAGAA 660
 50 TTCTTTGAAC GCTCTATGAT AATGTATACC GTTGGCTACT CCATCTCTTT TGGTTCCTTG 720
 GCTGTGGCTA TTCTCATCAT TGGTACTTTC AGACGATGTC ATTGCACTAG GAACATATATC 780
 CACATGCACT TATTGTGTGC TTTCATGCTG AGAGCTACAA GCATCTTTGT CAAAGACAGA 840
 GTAGTCCATG CTCACATAGG AGTAAAGGAG CTGGAGTCCC TAATAATGCA GGATGACCCA 900
 CAAAAATCCA TTGAGCAAC TTCTGTGGAC AAATCACAAT ATATCGGGTG CAAGATTGCT 960
 55 GTTGTGATGT TTAATTTACTT CCTGGCTACA AATTAATATT GGATCCCTGT GGAAGGTCTC 1020
 TACCTGCATA ATCTCATCTT TGTGGCTTTC TTTTCGACA CCAATACCT GTGGGGCTTC 1080
 ATCTGTATAG GCTGGGGGTT TCCAGCAGCA TTTGTGCGAG CATGGGCTGT GGCACGAGCA 1140
 ACTCTGGCTG ATGCGAGGTG CTGGGAACCT AGTGTGGAG ACATCAAGTG GATTATCAA 1200
 GCACCATCTT CAGACCTAT TGGGCTGAAT TTTATTCGT TTCTGAATAC GGTTAGAGTT 1260
 60 CTAGCTACCA AATCTGGGA GACCAATGCA GTTGGGCATG ACACAAGGAA GCATACAGG 1320
 AAACCTGGCA AATCGACACT GGTCTGTGTC CTAGTCTTTG GAGTGCATTA CATGTGTTTC 1380
 GTATGCTGTC CTCACTCTTT CACTGGGCTC GGGTGGGAGA TCCGATGCA CTGTGAGCTC 1440
 TTCTTCACT CCTTTCAGGG TTCTTTGTG TCTATCATCT ACTGTACTG CAATGGAGAG 1500
 GTTCAGGCMG AGGTGAAGAA GATGTGGAGT CGGTGGAATC TCTCGTGA CTGGAAAGG 1560
 65 ACACCGCCAT GTGGCAGCG CAGATGCGGC TCACTGCTCA CCACCGTGAC GCACAGCACC 1620
 AGCAGCCAGT CACAGGTGGC GGGCAGCACA CGCATGTGTC TTATCTCTGG CAAAGCTGCC 1680
 AAGATCGCCA GCAGACAGCC TGACAGCCAC ATCACTTTAC CTGGCTATGT CTGGAGTAAC 1740
 TCAGAGCAGG ACTGCCCTGC ACATCTTTC CACGAGGAGA CCAAGGAAGA TAGTGGGAGG 1800
 CAGGGAGATG ATATTCTAAT GGAGAAGCCT TCCAGGCCA TGGAACTAA CCCAGACACT 1860
 70 GAAGGATGCC AAGGAGAAAC TGAGGATGTT CTCGTA

Seq ID NO: 524 Protein sequence

Protein Accession #: Bos sequence

1 11 21 31 41 51
 75 MLRSLSLSTSI VLPLPSSPST INESLSRKR HRFLEQLDSD GTITIEBQIV LVLKAKVQCE 60
 LNTIAQLQEG EGNCFPEWDG LICNPRGTVG KISAVPCFPY IYDFNKGVA FHCNENGTW 120
 DFMHSLNKTW ANYSDCLEFL QPDISIGKQE PFERLYVMYT VGYSISFGSL AVAILLIGYF 180
 80 RRLHCTENXI RMHLFVSFML RATSIPVKDR VVHARIGVKE LESLIMQDDP QMSIEATSVD 240
 KSDYIGCKIA VVMFIYPLAT NYTWILVEGL YLHNLIFVAF FSDTKYLWGF ILIGWGFPA 300
 FVAAMAVARA TLADARCNEI SAGDIKNTYQ APILAAIGLN FILELNTVRV LATKIWETNA 360
 VGEDTRKQYR KLAKESTLVLV LVPGVHYIVF VCLPHSFTGL GWSIRMHCEL PFNSFQGFV 420
 SIICYCNGE VAQEVKRWWS RWNLSVDWKR TPPOGSRRCG SVLTIVHST SQSQVAAST 480

RMVLISGKAA KIASRQFDSH ITLPGYVWSN SRQDCLPHSF HEETKEDSGR QGDDILMEKP 540
SRPMESNPDT EGCQGETEDV L

Seq ID NO: 525 DNA sequence
Nucleic Acid Accession #: NM_005048
Coding sequence: 143..1795

1 11 21 31 41 51
| | | | |
10 GGGCGGTGGC CCGGGCCCGA CCACCCAGC TGCSCGTGCT TACTGGCCAC AAGTTTGGCTC 60
TGGGCGAGCC AAGTTGGCAA CTGGGAAGCT TCTCCCGGCG TCTGGAGGAG GGTCCTCTGCT 120
TCTTCTTACA GCGGTTCGCG GCATGGCCCG GCTGGGGGCG TCGCTCCACG TCTGGGGTTG 180
GCTAATGTCT GCGAGCTGCC TCCGTGCCAG AGCCGAGCTG GATCTGTATG GCACCATTAC 240
15 TATAGAGGAG CAGATTGTCC TTGTGCTGAA AGCGAAAGTA CAATGTGAAC TCAACATCAC 300
AGCTCAAGTC CAGGAGGGAG AAGGTAATG TTTCCTGAA TGGGATGGAC TCATTGTGTG 360
GCCGAGAGGA ACAGTGGGGA AAATATCGGC TGTTCATGCG CCTCCTTATA TTTATGACTT 420
CAACCTATAA GGAGTTGCTT TCCGACACTG TAACCCCAAT GGAACATGGG ATTTATATGA 480
CAGCTATAAT AAAACATGGG CCAATTATTC AGACTGCCCT CGCTTCTGCG AGCCAGATAT 540
20 CAGCATAGGA AAGCAAGAA TCCTTGAACG CCTCTATGTA ATGTATACCG TTGGCTACTC 600
CATCTCTTTT GGTTCCTTGG CTGTGGCTAT TCTCATCAT GGTACTTCA GAGCATATGA 660
TTGCACTAGG AACATATATC ACATGCACTT ATTTGTGTCT TTCATGTCTG GAGCTACAAG 720
CATCTTTGTC AAGACAGAGG TAGTCCATGC TCACATAGGA GTAAAGGAGC TGGAGTCCCT 780
AATATGTGAG GATGACCCAC AAAATTCCAT TGAGGCAACT TCTGTGGACA AATCACAATA 840
25 TATCGGTGCG AAGATTGCTG TTGTGATGTT TATTTACTTC CTGGCTACAA ATTATTATTG 900
GATCTGTGIG AAGGTCCTCT ACCTGCATAA TCTCATCTT GTGGCTTCT TTTGGGACAC 960
CAAAATACCTG TGGGGCTTCA TCTTGATAGG CTGGGGGTTT CCAGCAGCAT TTGTTGCAGC 1020
ATGGGCTGTG GCACGAGCAA CTCTGGCTGA TGCAGGTGCG TGGGAACCTA GTGCTGGAGA 1080
CATCAAGTGG ATTTATCAAG CACCGATCTT AGCAGCTATT GGGCTGAATT TTATTCIGTT 1140
30 TCTGAATACG GTTAGAGTTC TAGCTACCAA AATCTGGGAG ACCAATGCAG TTGGGCTATG 1200
CACAGGGAAG CAATACAGGA AACTGGCCAA ATCGACACTG GTCTGGTTC TAGTCTTTGG 1260
AGTGCAATAC ATCTGTGTG TATGCGCTGC TCACTCCTTC ACTGGGCTCG GGTGGGAGAT 1320
CCGATGACAC TGTGAGCTCT TCTTCAACTC CTTCAGGGT TTCTTTGTGT CTATCATCTA 1380
CTGCTACTGC AATGGAGAGG TTCAGCAGA GGTGAAGAAG ATGTGGAGTC GGTGAATCT 1440
35 CTCGGTGGAG TGGAAAAGGA CACCGCCATG TGGCAGCCCG AGATCGGCT CAGTGCCTAC 1500
CACCGTGAGC CACAGACCCA GCAGCCAGTC ACAGGTGGCG GCCAGCACAC GCATGGTGTCT 1560
TATCTCTGCG AAAGCTGCCA AGATCGCCAG CAGACAGCCT GACAGCCACA TCCTTTTACC 1620
TGGCTATGTC TGGAGTAACT CAGAGCAGGA CTGCGTCCCA CACTCTTTCC ACCAGGAGAC 1680
CAGGAAGAT AGTGGGAGGC AGGGAGATGA TATTCTAATG GAGAAGCCTT CCAGGCCAT 1740
40 GGAATCTAAC CCAGACACTG AAGGATGCCA AGGAGAAACT GAGGATGTTT TCTGAATGGA 1800
CATTTGTGGC TGACTTTTAT GGGCIGGTTC AATGGCTGGT TGTGTGAGAG GCTTGGCTG 1860
ATACTCCTAT GCTTGAGTTC AAAGGCTGAA AATTCAGTTA AGGTGTTACT TAATAATAGT 1920
TTTTAGGCTC CATGAATGCG CTCTGTAAA TACTAAGCAC ATGAAAATGC AAGTGTCAAT 1980
GGAGTAGTTT ATTACTTCTT ATTGCGATCA AGTTTCCCTC TAAATTAATG TATGATATT 2040
45 GCTCTGIGAT TGTTCATTTT TTYCTGCTAC TTTTGGGTAG AAAAAGATT CAATTGCTTG 2100
GCTGTAGCTT TCTCTCATAT ATATCACCTT AAATATAATG AAGATCTTTT AGTGTGTATC 2160
ATTTCTCTTT TAGAAGCTAG TATTCTCTTA TTTCTTACTT TAATGTACTT CTATCAGTGC 2220
ATTTATTTTG CTGTGCTATA GGAGCAATTA GGAATCTAAA AAATATATGG GAAGATAAAA 2280
GATCTAAGAA CAGTACTCTG CTGGAATAAT AGTTGGCTGG ACATTGATAA AATATGCAT 2340
50 TTATAACAAT TACATGTGTT TTTGGGAACA AGGAAAATT CTCAAAAAG AATATTTTAC 2400
ACATCCCTTC TTTTGAATGG CCTCTTTGIG ACCAGCCAGA CCTCAGGTCT TCCTCTTTTC 2460
TTCTTTGTAA ACCATGTCTAT GTGGAAGATG TTCTCAGT AGTGAGCTTG TGTCTGCAAA 2520
TTGATTTTGT TTGTATGATA TTTGATAGC AATCATGCT GCATCTATAT CTTTCTCTG 2580
TTTGAGCTGT TACTACATTG TACATGGCAT GTGGGATCAA TTAATAATT GTTTTAAAA 2640
T

Seq ID NO: 526 Protein sequence
Protein Accession #: NP_005039

1 11 21 31 41 51
| | | | |
60 MAGLGASLHV WGLMLGSC LARAQLDSG TITREQIVL VLIKAKVQCE NITATLQSGE 60
GNCFFENDGL ICHPRGTGVK ISAVPCFFYI YDFNEKGVAF RHCNPNGTWD FMHSLKNTWA 120
NYSCLRFELQ PDISIGKQEF FERLYVMYTV GYSISFGSLA VAILLIGYFR RLECHRYIH 180
65 MHLFVSFMLR ATSLFVKDQV VHAHIGVKEL ESLIMQDDPQ NSIETSVDK SQYIGCKLAV 240
VMFIYFLATN YYWILVEGLY LHLNLPVAF SDRKYLNGFI LIGWGFPAF VAAMAVARAT 300
LADARCWELS AGDIKMYQA PILAAIGLNF ILFLNTVKVL ATKIWETNAV GHDTRKQYRK 360
LAKSTLVLLV VFGVHYIVFV CLPESFTGLG WHIRMECEL FNSFQGFVVS ILYCYNGEV 420
QAEVKRMWSR WNLGVDWERT PPGSRRCGS VLTIVTSTB SQSQVAABTR MVLISGKAAK 480
70 IASRQFDSH ITLPGYVWSN SRQDCLPHSF HEETKEDSGR QGDDILMEKP SRPMESNPDT 540
GCQGETEDVL

Seq ID NO: 527 DNA sequence
Nucleic Acid Accession #: XM_036683
Coding sequence: 38..3655

1 11 21 31 41 51
| | | | |
75 GCTTTGCCCA GTAGTTGGAA AGTGAAGCTG ACTCGTGATG GTTCTCTGCT CACTTTGGTT 60
GATAGCAGCG GCTCTGCTAG AGGTTAGGAC TTCACTGATG GGACAAGCTG GTAATGAAGA 120
80 AATGCTGCAA ATAGATTTAC CAATAAAGAG ATATAGAGAG TATGAGCTCG TGAATCCAGT 180
CAGCACAAT CTAGAAGGAC GCTATCTCTC CCATCTCTCT TCTGCGAGTC ACAAAAGAG 240
GTCAGCGAGG GACGTGTCTT CCAACCCCTGA CGAGTGTTC TTTAACATCA CGGCATTG 300
AAAAGATTTT CATCTGCAC TAAAGCCCAA CACTCAACTA GTAGCTCTCG GGGCTGTTGT 360
GGAGTGGCAT GAGACATCTC TGTGCGCTCG GAATATAACC GATCCCATTA ACAACCATCA 420

	ACCAGGAAGT	GCTACGTTATA	GAATCCGGAA	AACAGAGCCT	TTGCAGACTA	ACTGTGCTTA	480
	TGTTGGTGAC	ATCGTGGACA	TTCCAGGAAC	CTCTGTTGCC	ATCAGCAACT	GTGATGGTCT	540
	GGCTGGAAATG	ATAAAAGTGG	ATAATGAAGA	GTATTTCATT	GAACCCCTGG	AAAGAGGTAA	600
5	ACAGATGGAG	GAAGAAAAG	GAAGGATTCA	TGTTGTCTAC	AAGAGATCAG	CTGTAGAACA	660
	GGCTCCCATTA	GACATGTCCA	AAGACTTCCA	CTACAGAGAG	TCCGACCTGG	AAGGCCTTGA	720
	TGATCTAGGT	ACTGTTTATG	GCAACATCCA	CCAGCAGCTG	AATGAAACAA	TGAGAGCCCG	780
	CAGACACCGG	GGAGAAAACG	ATTACAATAT	CGAGGTACTG	CTGGGAGTGG	ATGACTCTGT	840
	GGTCCGTTTC	CATGGCAAAG	AGCACGTCCA	AAACTACCTC	CTGACCCCTA	TGAACATTGT	900
	GAATGAATT	TACCATGATG	AGTCCCTCGG	AGTGCAATATA	AATGTGCTCC	TGGTGCCTAT	960
10	GATAATGCTG	GGATATGCAA	AGTCCATCAG	CCTCATAGAA	AGGGGAAACC	CATCCAGAAG	1020
	CTTGAGGAAAT	GTGTGTGCTG	GGGCGTCCCA	ACAGCAAAGA	TCTGATCTCA	ACCACCTCTGA	1080
	ACACCATGAC	CATCAATTTT	TTTAAACCG	GCAAGACTTT	GGACCTGCTG	GAATGCAAGG	1140
	ATATGCTCCA	GTACCGGCA	TGTGTCTATC	AGTGAGAAAT	TGTACCCCTGA	ATCATGAGGA	1200
	TGGTITTTCA	TCTGCTTTTG	TAGTAGCCCA	TGAACCGGGC	CATGTGTGGG	GAATGGAGCA	1260
15	TGATGGACAA	GGCACAAGGT	GTGGTGATGA	GACTGCTATG	GGAGGTGTCA	TGGCTCCCTT	1320
	GGTACAAGCA	GCAATCCATC	GTACCCACTG	GTCCCGATGC	AGTGGTCAAG	AACCTGAAAAG	1380
	ATATATCTAT	TCTTATGATC	GTCTCCTTGA	TGACCCCTTT	GATCATGATT	GGCTTAAACT	1440
	CCCAAGACTT	CCTGGAATCA	ATTATTCTAT	GGATGAGCAA	TGTCTTTTGG	ATTITGGTGT	1500
	TGGCTATAAA	ATGTGCACCG	CGTTCGGAAC	CTTTGACCCA	TGTAAACAGC	TGTGGTGTAG	1560
20	CCATCCTGAT	AATCCCTACT	TTTGTAAGAC	TAAAAGGGGA	CCTCCACTTG	ATGGGACTGA	1620
	ATGTGCTGCT	GGAAAATGGT	SCATAAAGGG	TCAATGCAATG	TGGAGGAATG	CTAATCAGCA	1680
	AAAACAAGAT	GGCAATGGG	GGTCATGGAC	TAAATTTGGC	TCCCTGTCTC	GGCATGTGG	1740
	AACTGGTGT	CGTTTCAGAA	CACGCCAGTG	CAATAATCCC	ATGCCATCA	ATGGTGGTCA	1800
	GGATTGTCTT	GGGTGTAATT	TTGAGTACCA	GCCTTTGTAAC	ACAGAAGAAT	GCCAAAACA	1860
25	CTTTGAGGAC	TTGAGAGCAC	AGCAGTGTCA	GCAGCGAAAC	TCCCACTTGG	AATACCAGAA	1920
	TACCAACAC	CACCTGGTTC	CATATGAACA	TCCGTACCCC	AAGAAAAGAT	GCCACCTTTA	1980
	CTGTACCTCC	AAGAGACTGG	GAGATGTTGC	TTACATGAAA	CAACTGGTGC	ATGATGGAAC	2040
	GCATGTTCT	TACAAAGATC	CATATAGCAT	ATGTGTGCGA	GGAGAGTGTG	TGAAAGTGGG	2100
	CTGTGATAAA	GAATTTGGTT	CTAATAAGGT	TGAGGATAAG	TGTGGTGTCT	TGGGAGGAGA	2160
30	TAATTCCAC	TGCCAAACCG	TGAAGGGGAC	ATTTACCAGA	ACTCCACGGA	AGCTTGGGTA	2220
	CCTTAAGATG	TTTGATATAC	CCCTTGGGGC	TAGATATGTG	TTAATCCAAAG	AAGACGAGGC	2280
	TTCTCCTCAT	ATCTTTGCTA	TTAAGAACCA	GGCTACAGGC	CATTATATTT	TAAATGGCAA	2340
	AGGGGAGGAA	GCCAACTGCG	GGACCTTCAT	AGATCTTGGT	GTGGAGTGGG	ATTATAACAT	2400
	TGAAGATGAC	ATTGAAGTGC	TTTACACCCA	TGGACCTTTA	CATGATCCTG	TTATTGTTTT	2460
35	GATATACCT	CAAGAAAATG	ATACCCGCTC	TAGCCCTGACA	TATAAGTACA	TGATCCATGA	2520
	AGACTCTGTA	CCTACAAATCA	ACAGCAACAA	TGTCATCCAG	GAAGAATTAG	ATACCTTTGA	2580
	GTGGGCTTTG	AAGAGCTGGT	CTCAGTGTTC	CAAAACCTGT	GGTGGAGGTT	TCCAGTACAC	2640
	TAAATATGGA	TGCCGTAGGA	AAAGTGATAA	TAAATGGTTC	CATCGCAGCT	TCTGTGAGGC	2700
	CAACAAAAG	CCGAATCCTA	TTAGACGAAT	GTGCAATATT	CAAGAGTGTG	CATATCCACT	2760
40	CTGGGTAGCA	GAAGAAATGG	AACACTGAC	CAAAACCTGT	GGAGTCTCTG	GCTATCAGCT	2820
	TCCGACTGTA	CGCTGCCCTC	AGCCACTCCT	TGATGACACC	AACCGCTCTG	TGCACAGCAA	2880
	ATACTCTGAT	GCTGACCTTC	CCGAGAGCCG	CCGGCCCTGT	AACAGAGTGC	CCTGCCCTGC	2940
	ACAGTGGAAA	ACAGGACCCCT	GGAGTGAGTG	TTCACTGACC	TCCGCTGAAG	GAACGGAGGT	3000
	GAGGACAGCT	CTCTGACAGG	CTGGGACCA	CTGTGATGGT	GAAAAGCCTG	AGTCCGTCAG	3060
45	AGCCTGTCAA	CTGCCCTCCT	GTAAATGATGA	ACCATGTTTG	GGAGACAAGT	CCATATCTCTG	3120
	TCAATGGGAA	GGTTTGGCAC	GATACCTGCTC	CATACCAAGT	TATAACAAGT	TATGTTGTGA	3180
	GTCTGTCAGC	AAGCGACGTA	GCACCCCTGCC	ACCAACATAC	CTTCTAGAAG	CTGCTGAAAC	3240
	TCAATGATAT	GTCTCTCTTA	ACCCTAGTGA	CCTCCCTAGA	TCTCTAGTGA	TGCCCTACATC	3300
	TTTGGTTTCT	TATCTTCTAG	AGACCCCTGC	AAGAAGATG	TCCTTGAGTA	GCATCTCTCT	3360
50	AGTGGGAGGT	CCAAATGCTAT	ATGCTGCTTT	CAGGCCAAAC	AGTAAACCTG	ATGGTGTCTAA	3420
	TTTACGCTCAG	AGGAGTGCTC	AGCAAGCAGG	AAGTAAGACT	GTGAGACTGG	TCACCGTACC	3480
	ATCCCTCCCAA	CCCAACAAGA	GGGTCCACCT	CAGTTCAGCT	TCACAATAGG	CTGCTGCTTC	3540
	CTTCTTTGCA	GCCAGTGATT	CAATAGGTGC	TTCTTCTCAG	GCAAGAACCT	CAAGAGAAAG	3600
	TGGAAGATGC	ATTGACACAC	GACGTCCGAC	AAGATCATCC	ACCTTAGAAA	GATGAGAAAG	3660
55	TGAACCAAAA	AGGCTAGAAA	CCAGAGGAAA	ACCTTGACAA	CCTCTCTCTT	CCCATGGTGC	3720
	ATATGCTTGT	TTAAATGGGA	AATCTCTATA	GATGCTCAGC	TGATTTTATC	TGTAATTTGA	3780
	AGAACAAGAA	GTGCTGGCTC	ACTTTCTAGT	TGCTTCTATC	CTCCTTTTGT	CTGCTGAAAC	3840
	CTCATTTACC	AGATTTCAAT	GGAGAGAAATC	ACCAAGATT	ATTACAAAAG	AAAAATATGT	3900
	TGCTAAGAT	GTGTTGGTGC	CTCTCTGAAG	CAGAAAAGGG	ACTGGAACCA	ATTGTGCTAA	3960
60	TCAGCTGACT	TTTTGTTTGT	TTTAGAAAAG	TTACACTAAA	AATTAAGAG	AGATACCAAT	4020
	GGTTTACAT	TTAACAAGAA	ATTTTGGATA	TGGAACAAAG	AATTTCTAGA	CTGTATTTCC	4080
	TATTTATCTA	TATTAGAAAT	ATTGTATGAG	CAAAATTTGCA	GCTGTTGTGT	AAATACTGTA	4140
	TATTGCAAAA	ATCAGTATTA	TTTAAAGAGA	TGTGTTCTCA	AATGATTTGT	TACTATATTA	4200
	CATTTCTGGA	GTGTTCTAGT	GCCTGTCTGT	GAGTATGCTC	TTGTTTGACA	TTCTATAGGT	4260
65	TAATTTTCAA	AGCAGAGTAT	TACAAAAGAG	AAGTTAGAAT	TACAGCTACT	GACAAATATA	4320
	AGGGTTTTGT	TGAATCAACA	ATGTGATACG	TAAATTATAG	AAAAAGAAA	GAAACACAAA	4380
	AGCTATAGAT	ATACAGATAT	CAGCTTACCT	ATTGCCCTCT	ATACCTATAA	TTTAAAGGAT	4440
	TGGTGTCTTA	GTACACTTGT	GGTCACAGGG	ATCAACGAAT	AGTAAATAAT	GAACTCGTGC	4500
	AAGACAAAAC	TGAACCCCTC	TTTCCAGGAC	CTCAGTAGGC	ACCGTTGAGG	TGTCTTTTGT	4560
70	TTTTGTGTGT	GTGTGTTCTT	TTTTAATTTT	CGCATTTGTT	ACAGATACAA	ACAGTTATAC	4620
	TCAATGTACT	GTAAATATCT	CAAAGGAAAA	AGTTTGGGGA	TAACTTATTT	GTATGTTGGT	4680
	AGCTGAGAAA	AATATCATCA	GTCTAGAATT	GATATTTGAG	TATAGTAGAG	CTTTGGGGCT	4740
	TGAAGGGCAG	GTTCAGAAAA	GCATATGTCT	ATGGTTGAGA	TATTTATTTT	CCATATGGGT	4800
	CATGTTCTAA	GTTTCAACAC	CACATGCAAT	CTGACTGCAA	TAAATGTGCTA	ATAATTTATG	4860
75	TCAGTAGTCA	CCTTGCTCAC	AGCAAGGCCA	GAATGCTCT	CTCCAGGGAG	TAGATGTAAA	4920
	GTACTTGTAC	ATAGAATTCA	GAAGTGAAGA	TATTTATTAA	AAGTTGATTT	TTTTTCTCTG	4980
	ATAGTATTTT	TATGACTATA	ATATTACAC	TAAATCAAT	TACATATTTT	GGTAAACTAG	5040
	AGAGACATAA	TTAGAGATGC	ATGCTTTGTT	CTGTGCTAG	AGACCTTTAA	GCAAACTACT	5100
	ACAGCCAACT	TGAAGCTTAA	AACGTGAACAA	ATTTGATGTT	ATGCAACAT	CTTGCAATTT	5160
80	TAGTAGTTGA	TATTAAGTTG	ATGACTTGT	TCCCTTCAAG	GAAACATTA	ATTGTATGGA	5220
	CTCAGCTAGC	TGTTCAATGA	AATTTGTGAAT	TAGAAACATT	TTTTAAAGTT	TTTGAAGAG	5280
	ATAAGTGCAT	CATGAATTAC	ATGTACATGA	GAGGAGATAG	TGATATGATC	ATAATGATTT	5340
	TGAGGTCAAT	ACCTGAGCTG	TCTAATAATA	TATTATACAA	ACTAAATATG	AGATGAATTA	5400
	ACCTCTCAAA	GCACAGAAATG	TGCAAGAACT	TTTGCATTTT	AATGTTTGA	AACTAACAGC	5460

TTAACACTATT GACTCTATAC CTCTAAAGAA TTGCTGCTAC TTTGTGCAAG AACTTTGAAG 5520
 GTCAAAATAG GCAAATTCOA GATAGTAAAA CAATCCCTAA GCCTTAAGTC TTTTITTTTT 5580
 CCTAAAAATT CCATAGAAAT AAAATTCTCT CTAGTTTACT TGTGTGTGCA TACATCTCAT 5640
 CCAAGGGGGA AGATAAGAT GGTACACAAA ACAGTTTCCA TAAAGATGTA CATATTCAAT 5700
 ATACTTCTGA CCTTGGGCT TCTTTTCTA CTAAGCTAAA AATTCCTTT TATCAAAGTG 5760
 TACACTACTG ATGCTGTTTG TTGTACTGAG AGCAGCTACC AATAAAATG TTAACAAAT 5820
 AT

Seq ID NO: 528 Protein sequence
 Protein Accession #: XP_036683

1 11 21 31 41 51
 MVLISLNLIA AALVEVRTSA DGQAGNEEMV QIDLPIKRYR EYELVTPVST NLEGRYLSHT 60
 LSASHKKRSA RDVSSNPEQL FENITAFGKD FHLRLKENTD LVAPGAVVEM HETSLVPGNI 120
 TDPINNHPQG SATYRIKITE PLQTNCAVVG DIVDIPGTSV AINCDGLAG MIKSDNEEYF 180
 IEPLEGRGQM EREKGRHIVV YKRSAVEQAP IDMSKDFHYR ESDLEGLDDL GTVYGNIBQQ 240
 LNETMRRRRH AGENDYNIEV LIGVDDSVVR FHGKEHVQNY LITLNNIVNE TYHDES LGVH 300
 INVVLVRMIM LGYAKSISLI ERGNPSRSL E NVCRWASQQQ RSDLNHSEHH DHAIFLTRQD 360
 FGPAGMQGYA FVTGMCRFVR SCTLNHEDGF SSAFVVAHET GHVLGMEHDG QGNRCODETA 420
 MGSVMALIVQ AAFERYHWSR CSQQLKRYI HSYDCLDDP FDHDMFKLPE LFGINYSMDE 480
 QCRDFGVGY KMTAFRTFD PCKQLWCSPH DNPYFCRTKK GPPLDGTBCA AGKWCYKGHG 540
 MWKIANQQKQ DGNWGSWTKF GSCSRTCQGT VRPRTQCNN PMPINGGQDC PGVNFYQLC 600
 NTECQKHFE DFRAQQCQQR NSEFEYQNTK HNNLPYEPD PKKCHLYCQ SKETADVAYM 660
 RQLVHDGTHC SYNDPYSICV RGEVVKVGD KEIGSNKVED KCGVCGGDS ECRTVKGTFT 720
 RTPRLKLYLK MFDIPPGARH VLIQDEASR HILAINKQAT GHYILNGKGE BAKSRTFIDL 780
 GVENDYNIED DIESLHTDGP LHDPIVILII PQENDTRSSL TYKIIHEDS VPTINSNNVI 840
 QBEIDTFEWA LKSWSCSKPK CGGGFYQTKY GCRRKSDNKM VHRSFCEANK KFKPIRRMCN 900
 IQECTHPLWV AEWSEHCTKT CGSSGYQLRT VRCLOPLLDG TNRSVHSKYC MGDREPSRRP 960
 CNRVCPAQW KTFWSECSV TCEBTEVRQ VLCRAGDECD GEKPESVRAC QLPCCNDEPC 1020
 LGDKEIFCQM EVLARYCSIP GYNKLCCEBC SKRSTLPPP YLLEAAETHD DIVSNPSDL 1080
 RSLVMPSTLV PYSETPAKK MSLSSISVVG GPNAYAFRP NSKPDGANLR QREAAQAGSK 1140
 TVRLVTVFSS PPTKRVHLSS ASQMAAASFF AASDSIGASS QARTSKKDGK IIDNRPTRS 1200
 STLER

Seq ID NO: 529 DNA sequence
 Nucleic Acid Accession #: NM_002774
 Coding sequence: 246..980

1 11 21 31 41 51
 AGGCGGACAA AGCCCGATTG TTCTGGGCC CTTTCCCAT CGCGCTGGG CTGCTCCCC 60
 AGCCCGGGGC AGGCGCGGGG GCCAGTGTGG TGACACAGC TGTAGCTGTC TCCCGGCTG 120
 GCTGGCTGCG TCTCTCTGG GGACACAGAG GTCGGCAGGC AGCACACAGA GGGACCTAG 180
 GGCAGCTGTT CCTTCCCGCG ACTCAAGAA CCCCAGAGGC CCGGAGGCCT GCAGCAGGAG 240
 CGGCCATGAA GAAGCTGATG GTGTGCTGA GTCTGATTGC TGACGCTGG GCAGAGGAGC 300
 AGAATAAGTT GGTGATGGC GGACCTGCG ACAAGACATC TCACCCCTAC CAAGCTGCC 360
 TCTACACCTC GGGCCACTTG CTCTGTGGTG GGGTCTTAT CCATCCACTG TGGGTCTCA 420
 CAGCTGCCCA AEWSEHCTKT CGGAATCTTC AGGTCTTCT GGGGAAGCAT AACCTTCGG 480
 AAAGGGAGAG TTCCAGGAG CAGAGTCTG TTGTCCGGC TGTGATCCAC CTGACTATG 540
 ATGCCGCCAG CCATGACAGC GACATCTGTC TGTTCGCCCT GGCACGCCA GCCAACTCT 600
 CTGAATCAT CCAGCCCTCT CCCTGGAGA GGGACTGCTC AGCCACACC ACCAGTCCC 660
 ACATCCYGGG CTGGGGCAG ACAGCAGATG GTGATTTCOC TGACACCATC CAGTGTGAT 720
 ACATCCACTT GGTGTCCCGT GAGGAGTGTG AGCATGCCCA CCTGGGCCAG ATCACACAGA 780
 ACATGTTGTG TGCTGGGGAT GAGAAGTAC GGAAGGATTC CTGCCAGGCT GATTCTGGG 840
 GTCGCTGCT ATGTGGAGAC CACTCCGAG GCCTGTGTG ATGGGGTAAC ATCCCTGTG 900
 GATCRAAGGA GAAGCCAGGA GTCTACACCA AGTCTGCGAG ATACACGAAC TGGATCCAA 960
 AAACCATTC AAGCCAGTGA CCTGACATG TGACATCTAC CTCGCCACT ACCACCCAC 1020
 TGGCTGGTTC CAGAAGCTCT CTCACCTAGA CCTTGCCTCC CCTCTCTCT TGCCAGCTC 1080
 TGACCTGAT GCTTAATAAA GGCAGCGACG TGAGGGTCT GATTCTCCT GGTTTTACC 1140
 CAGCTCCATC CTTCGATCAC TGGGGAGGAC GTGATGAGTG AGGACTTGG TCTCGGTCT 1200
 TACCCOCACC ACTAAGAGAA TACAGGAAAA TCCTTCTAG GCATCTCTC TCCCCACCC 1260
 TTCCACAGGT TGTATTTCTT CCTGCAGAGG CCCAGCCACG TGTCTGGAA CCGAGCTCC 1320
 CTGCTTACTG TCGGTGTCCC CTGGGATGT ACCTTCTTC ACTGCAGATT TCTCACCTGT 1380
 AAGATBAAGA TAAGGATGAT ACAGTCTCCA TCAGGCAGTG GCTGTGGAA AGATTTAAGA 1440
 TTTACACCT ATGACATACA TGGGATAGCA CTGGGCCGC CATGACTCA ATAGAATG 1500
 TATTTT

Seq ID NO: 530 Protein sequence
 Protein Accession #: NP_002765

1 11 21 31 41 51
 MKKLMVLSL IAAANABEQN KLVEGGPCKD TSHPYQAALY TSGHLLCGGV LIHPLMVLTA 60
 AHCKPMLQV FLGKHNLRQ ESKQESVSV RAVIHEDYDA AHDQDQIMLL RLARPALKSE 120
 LIQPLPLERD CSANTTSCHI LGNGKTADGD FPDITQCAVI HLVSRECEH AYPQITQNM 180
 LCAGDEKYGK DSCQGDSSGP LVCCGDLRLGL VSWGNIFCGS KKPQGVYTNV CRYTNWIKT 240
 IQAK

Seq ID NO: 531 DNA sequence
 Nucleic Acid Accession #: NM_012152
 Coding sequence: 43..1104

1 11 21 31 41 51

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CTTCTTTAA	TTTCTTTCTA	GGATGTTTAC	TTCTTCTCCA	CAATGAATGA	GTGTCACTAT	60
GACAAGCACA	TGGACTTTT	TTATAATAGG	AGCAACACTG	ATACTGTGCA	TGACTGGACA	120
GGAAACAAGC	TTTGTATTGT	TTTGTGTGTT	GGGACGTTT	TCIGCCTGTT	TATTTTTTTT	180
TCTAATTCTC	TGTCATCGC	GGCAGTGATC	AAAAACAGAA	AATTTCAIT	CCCCTTCTAC	240
TACCTGTGG	CTAATTAGC	TGCTGCCGAT	TTCTTGGCTG	GAATTGCTTA	TGTATTCTCTG	300
ATGTTTAAAC	CAGGCCGAGT	TTCAAAAAC	TGACTGTCA	ACCGCTGGT	TCTCCGTGAG	360
GGGCTTCGG	ACAGTAGCTT	GACTGCTTCC	CTCACCAACT	TGCTGGTTAT	CGCCGTGGAG	420
AGGCACATGT	CAATCATGAG	GATGCGGGTC	CATAGCAACC	TGACCAAAA	GAGGGTGACA	480
CTGCTCATTT	TGCTTGTCTG	GGCCATCGCC	ATTTTATG	GGGCGGTCCC	CACACTGGGC	540
TGGAATTGCC	TCTGCAACAT	CTCTGCCCTG	TCCTCCCTGG	CCCCCATTTA	CAGCAGGAGT	600
TACCTTGT	TCTGGACAGT	GTCCAACCTC	ATGGCCTTCC	TCATCATGGT	TGTGGTGATC	660
CTGCGGATCT	ACGTGTACGT	CAAGAGGAAA	ACCAACGTCT	TGCTCCGCA	TACAAGTGGG	720
TCCATCAGCC	GGCGGAGGAC	ACCCATGAAG	CTAATGAAGA	CGGTGATGAC	TGCTTAGGG	780
GGCTTGGGG	TATGCTGGAC	CCGGGCTTG	GTGGTCTGTC	TCCTCGACGG	CCTGAAGTGC	840
AGGCAGTGTG	GGGTGACGCA	TGTGAAAAGG	TGGTCTCTGC	TGCTGGCGCT	GCTCAACTCC	900
GTGCTGAACC	CCATCATCTA	CTCCTACAAG	GACGAGGACA	TGTATGGCAC	CATGAAGAAG	960
ATGATCTGCT	GCTTCTCTCA	GGAGAACCCA	GAGAGGGCTC	CCTCTGTCAT	CCCCCCACA	1020
GTCTCAGCA	GGAGTGACAC	AGGCAGCCAG	TACATAGAGG	ATAGTATTAG	CCAAGGTGCA	1080
GTCTGCAATA	AAAGCACTTC	CTAAACTCTG	GATGCCCTCT	GGCCACCCA	GGTGTGACT	1140
GTCTTAGG						

Seq ID NO: 532 Protein sequence
Protein Accession #: NP_036284

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1	11	21	31	41	51	
MNECHYDKHM	DFEYNRENTD	TVDDWTGTKL	VIVLCVGTFF	CLFIFFSNLS	VIAAVIKNRK	60
FEFFPPYLLA	MLAADFFAG	IAYVFLMENT	GPVSKILIVN	RWFILRQQLD	SBLTASLTNL	120
LVIAVERHMS	IMNRVRSNL	TKRVTLLIL	LVWAIALFMS	AVPTLGNWCL	CNISACSSLA	180
PTYSRSLYLV	WTWSNLMAFL	IMVVVYLR	VYVRRKTIVL	SPHTSGSISR	RRTFMKLMKT	240
VMTVLGAFVV	TGGLVLL	LDGLNCRQCG	VOEVKRWFL	LALNLSVNP	IISYKDEDM	300
YGTMKMNIC	FSQENPERR	SRIPSTVLSR	SDTGSQYIED	SISQGAVCNK	STS	

Seq ID NO: 533 DNA sequence
Nucleic Acid Accession #: NM_002821
Coding sequence: 150..3362

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AACTCCCGCC	TCGGGACGCC	TCGGGGTCGG	GCTCCGCTG	CGGCTGCTGC	TGCGGGCCCC	60
GGCTCCCGGT	GGCTCCGCT	CGCTGCGCG	CGCGGAGCA	GTCTGCGGCC	CGCCGTGCGC	120
CCTCAGCTCC	TTTTCTGAG	CCCGCCGCA	TGGGAGCTGC	GGCGGATCC	CGGCCAGAC	180
CCGCGCGGT	GCTCTGCTC	AGCGTCTGC	TGCTGCGCT	GCTGGCGGT	ACCCAGACAG	240
CCATTGTCTT	CATCAAGCAG	CGTCTCTCC	AGGATGCACT	GCAGGGGCGC	CGGGCGCTGC	300
TTCTGTGTA	GGTTGAGCT	CCGGGCGCG	TACATGTGA	CTGGCTGCTC	GATGGGGCCG	360
CTGTCCAGCA	CACGAGCGG	CGTTTCGCC	AGGGCAGCAG	CCTGAGCTTT	GCAGCTGTGG	420
ACCGGCTGCA	GGACTCTGGC	ACCTTCCAGT	GTGTGGCTCG	GGATGATGTC	ACTGGAGAAG	480
AAGCCGCGAG	TGCCAACGCC	TCCTTCAACA	TCAAATGGAT	TGAGGCAGGT	CGTGTGCTCC	540
TGAAGCATCC	AGCCTCGGAA	GCTGAGATCC	AGCCACAGAC	CCAGGTACCA	CTTCGTGCTC	600
ACATTGATGG	GCACCTCCGG	CCCACCTAOC	AAATGGTTCOG	AGATGGGACC	CCCCTTTCTG	660
ATGGTCAGAG	CAACACACACA	GTCAGCAGCA	AGGAGCGGAA	CCTGACGCTC	CGGCCAGCTG	720
GTCTGAGCA	TATTGGGCTG	TATTCCTGCT	GCGCCACAG	TGCTTTTGGC	CAGGCTTGCA	780
GCAGCCAGAA	CTTCACTTGG	AGCATTGTCT	ATGAATGCTT	TGCCAGGGTG	GTGCTGGCAC	840
CCCAGGACGT	GGTAGTAGCG	AGGTATGAGG	AGGCCATGTT	CCATTGCCCAG	TTCTCAGCCC	900
AGCCACCCCC	GGGCTCTGAG	TGGCTCTTTG	AGGATGAGAC	TCCCATCACT	AACCGCAGTC	960
GGCCCCCAAC	CTCTCCGACA	GCCACAGTGT	TTGCCAAAGG	GTCTCTGCTG	CTACCCAGG	1020
TCCGGCCAGG	CAATGAGGG	ATCTACCGCT	GCATTGGCCA	GGGGCAGAGG	GGGCCACCCA	1080
TCATCTGGA	AGGCCACCTT	CACCTAGCAG	AGATTGAAGA	CATGCCGCTA	TTTGAGCCAC	1140
GGGTGTTTAC	AGCTGGCAGC	GAGGAGCGTG	TGACCTGCTT	TCCCCCAAG	GGTCTGCCAG	1200
AGCCACAGGT	TGGTGGGGAG	CACGCGGGAG	TCCGGCTGCC	CACCCATGGC	AGGGTCTAAC	1260
AGAAAGGCCA	CGAGCTGGTG	TTGGCCAAAT	TTGCTGAAAG	TGATGCTGGT	GTCTACACCT	1320
GCCACGCGGC	CAACCTGGCT	GCTCAGCGGA	GACAGGATGT	CAACATCACT	GTGGCCACTG	1380
TGCCCTCTCT	GCTGAAGAAG	CCCCAAGACA	GCCAGCTGGA	GGAGGGCAAA	CCGGCTACT	1440
TGGATTGCTT	GACCCAGGCC	ACACCAAAAC	CTACATTTGT	CTGGTACAGA	AACCAGATGC	1500
TCATCTCAGA	GGACTCAOGG	TTCGAGGTCT	TCAAGATAGG	GACCTTGCAG	ATCAACAGCG	1560
TGGAGGTGTA	TGATGGGACA	TGGTACCGTT	GTATGAGCAG	CACCCAGGCC	GGCAGCATCG	1620
AGGCGCAGGC	CGGTGTCCAA	GTGCTGGAAG	AGCTCAAGTT	CACACCAACA	CCCCAGCCAC	1680
AGCAGTGCAT	GGAGTTTGAC	AAGGAGGCCA	CGGTGCCCTG	TTGAGCCACA	GGCCGAGAGA	1740
AGCCCACTAT	TAAGTGGGAA	CGGGCAGATG	GGAGCAGCCT	CCCAGAGTGG	GTGACAGACA	1800
ACGCTGGGAC	CCTGCATTTT	GCCCCGGTGA	CTCGAGATGA	CGCTGGCAAC	TACACTTGTA	1860
TTGCTCCAA	CGGGCCGCGAG	GGCCAGATTC	GTCGCCATGT	CCAGCTCACT	GTGGCAGTTT	1920
TTATCACCTT	CAAAAGTGAAG	CCAGAGCGTA	CGACTGTGTA	CCAGGGCCAC	ACAGCCCTAC	1980
TGCACTGCGA	GGCCCGGGGG	GACCCCAAGC	CGCTGATTCA	GTGGAAGGCG	AAGGACCGCA	2040
TCCTGGACCC	CACCAAGCTG	GGACCCAGGA	TGCACATCTT	CCAGATGGCC	TCCCTGGTGA	2100
TCCATGACGT	GGCCCTCGAG	GACTCAGGCC	GCTACACCTG	CATTGCGAGC	AACAGCTGCA	2160
ACATCAAGCA	CACGAGGGCC	CCOCTCTATG	TGCTGGAACA	GCTGTGCGCG	GAGGAGTCCG	2220
AGGGCCCTGG	GACCCCTCCC	CCCTACAAGA	TGATCCAGAC	CATTGGGTTG	TGGTGGGGTG	2280
CCGCTGTGGC	CTACATCAT	GCGTGTCTGG	GCTTCATGTT	CTACTGCAAG	AAGCGCTGCA	2340
AAGCCAGCG	GCTGCAGAG	CAGCCCGAGG	GCGAGGAGCC	AGAGATGGAA	TGCCCTCAAG	2400
GAGGCGCTTT	GCAGAAAGCG	CAGCCCTCAG	CAGAGATCCA	AGAGAAAGTG	GCTTGTGACA	2460
GCTTGGGCTC	CGGCCCGCGG	GCCACCAACA	AACGCCACAG	CACAAGTGAT	AAGATGCACT	2520
TCCACGCTC	TAGCCCTGAG	CCCATCACA	CGCTGGGGAA	GAGTGAGTTT	GGGAGGGTGT	2580
TCCTGGCAAA	GGCTCAGGCC	TTGGAGGAGG	GAGTGGCAGA	GACCTTGTA	CTTGTGAAGA	2640

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GCCTGCAGAC GAAGGATGAG CAGCAGCAGC TGGACTTCGG GAGGGAGTTG GAGATGTTTG 2700
GGAGAGCTGAA CCACGCCCAAC GTGGTGCBCG TCCCTGGGGCT GTGCCGGGAG GCTGAGCCCC 2760
ACTACATGGT GCTGGAATAT GTGGATCTGG GAGACCTCAA GCAGTTCTCG AGGATTTCCA 2820
AGAGCAAGGA TGAAAAATG AAGTCACAGC CCCTCAGCAC CAAGCAGAAG GTGGCCCTAT 2880
GCACCCAGGT AGCCCTGGGC ATGGAGCACC TGCCAACAA COGCTTTGTG CATAGGAGCT 2940
TGGCTGCGCG TAACCTGCGT GTCACTGCCC AGAGACAAGT GAAGGTGTCT GCCCTGGGCC 3000
TCAGCAAGGA TGTGTACAAC AGTGAGTACT ACCACTTCGG CCAGGCGCTGG GTGCCGCTGC 3060
GCTGGATGTC CCGCGAGGCC ATCTCGGAGG GTGACTTCTC TACCAAGTCT GATGCTCTGG 3120
CCTTCGGTGT GCTGATGTGG GAAGTGTTTA CACATGGAGA GATGCCCAT GGTGGGCAGG 3180
CAGATGATGA AGTACTGGCA GATTTCGAGG CTGGGAAGGC TAGACTTCCT CAGCCCGAGG 3240
GCTGCCCCCTT CAAACTCTAT CGGCTGATGC AGCGCTGCTG GGCCTCAGC CCAAGGACCC 3300
GGCCCTCGCTT CAGTGAGATT GCCAGCGCCC TGGGAGACAG CACCGTGGAC AGCAAGCCGT 3360
GAGGAGGGAG CCCCTCAGG ATGGCTTGGG CAGGGCAGGA CATCTCTAGA GGAAGCTCA 3420
CAGCATGATG GCGAAGATCC CTGTCTCTCT GGGCCCTGAG GTGCCCTAGT GCAACAGGCA 3480
TTGCTGAGGT CTGAGCAGGG CCTGGCCCTTT CCTCTCTTTC CTCACCCCTCA TCCTTTGGGA 3540
GGCTGACTTG GACCCAAACT GGGCGACTAG GGCTTTGAGC TGGGCAGTTT CCCTTGCCAC 3600
CTCTCTCGCTT ATCAGGGACA GTGTGGGTGC CACAGTAAC CCCAATTCTT GGCCTTCAAC 3660
TTCTCCCTCT GACCGGGTCC AACTCTGCCA CTCATCTGCC AACTTTGCCT GGGGAGGGCT 3720
AGGCTTGGGA TGAGCTGGGT TTGTGGGGAG TTCTTAAATA TTCTCAAGTT CTGGGCACAC 3780
AGGGTTAATG AGTCTCTTGC CCACCTGGTC ACTTGGGGGT CTAGACCAGG ATTATAGAGG 3840
ACACAGCAAG TGAATCTCTC CCACCTGCGG CTGTGCACA CTGACCCAGA CCCACGCTCT 3900
CCCACTCGCTT CTCTCTCTT CTAATCTTAA GTGCTGGCA GATGAAGGAG TTTTTCAGGAG 3960
CTTTTGACAC TATATAAACC GCGCTTTTTC TATGCACCAC GGGCGGCTTT TATATGTAAT 4020
TGCAGCGTGG GGTGGGTGGG CATGGGAGGT AGGGGTGGGG CCTGGAGATG AGGAGGGTGG 4080
GCCATCCTTA CCCACACTT TTATGTGTGT CGTTTGTGT TGTGTTGTGT TTTTGTGTTT 4140
TGTTTGTGTT TTTACACTCG CTGCTCTCAA TAAATAAGCC TTTTTTA

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Seq ID NO: 534 Protein sequence
Protein Accession #: NP_002812

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1 11 21 31 41 51
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VEVYWLDDGA FVQDTERRFA QGSSLSFAAV DRLDQSGTFQ CVARDVTVGE EARSANASFN 120
IKWIRAGPVV LKHPASEAEI QPQTQVTLRC HYDGHPRPTY QWERDGTPLS DGQSNHTVSS 180
KERNLTLRFA GFEHSGLYSC CAHSAFOQAC SQCNFTLEIA DESPARVULA PQDVVVARYE 240
EAMFHQCFBA QPPPSLQWLF EDETPTNRS RPPHLRRATV FANGSLLLTQ VRPNAGIYR 300
CTGQGGQGGP IILBATLHLA BIRDMPLFEP RVFTAGSEER VTCLPFGKLP EFSVWWEAG 360
VRLPTHGRVY QKQHELVLAN IASSDAGVYT CHAANLAGOR RQDVNITVAT VPSWLKKPQD 420
SQLBEGKPGY LDCLQATPK PTVVYRNQM LISEDSRFEV FKNSTLRINS VEYVDGTWYR 480
CMSSTPAGSI EAQARVQVLE KLFETPPFPQ QCCMEFDKEA TVPCCSATGRE KPTIKNERAD 540
GSSLPEWVTD NAGTLHFARV TDDAGNYTC IASNGPQGI RAHVQLTAVV FITFKVEPER 600
TFVYQHTAL LQCEAQGDPK PLIQWKGKDE ILDETILGER MHIFQNGSLV IHDVAPRDSG 660
RYTCLAGNSC NIKHTEAPLY VVDKVPVFEES EGPSPPPPYK MIQTIGLSVG AAVAYIIAVL 720
GLMFYCKPGY KAKRLQKQPE GEPEMECLN GGPLQNGQPS AEIQBEVALT SLGSGPAATN 780
KRHSTDIDMH FPRSLQPIIT TLGRSEFGEV FLAKAQGLEB GVAETILVLK SLQTKDBQQQ 840
LDFRRELEVD KKLNHANVVR LLGLCRBAEP HYMVLEYVDL GDLKQFLRIS KSKDEKLKSO 900
PLSTKQKVAL CTQVALGMEH LNNRFVHKD LAARNCLVSA QROVVRBALG LSKDVYNSEY 960
YHFRQAWVPL RWSPEALIE GDFSTKSDVW AFGVLMHEVF THGEMPHGGQ ADDEVLADLIQ 1020
AGKARLPQPE GCPSLKYRLM QRCWALSPKD RPSFSRISA LGSSTVDSKP

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Seq ID NO: 535 DNA sequence
Nucleic Acid Accession #: NM_013952
Coding sequence: 161..1357

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1 11 21 31 41 51
TTCAGAGGA GGAGAGACAC CGGGCCAGG GCACCCCTCG GGGCGGGCGG ACCCAAGCAG 60
TGAGGGCCTG CAGCCGGCCG GCCAGGGCAG CGGCAGGCGC GGCCTGGACC TAOGGAGGA 120
AGCCCGAGAG CCTGGCGGGG CTGCGAGCGA CTCGCCGGGG ATGCCCTACA ACTCCATCAG 180
ATCTGGCCAT GGAGGGCTGA ACCAGCTGGG AGGGGCTTT GTGAATGGCA GACCTCTGCC 240
GGAAATGATC CGCCAGCGCA TCGTAGACCT GGCCCAACAG GGTGTAAGGC CCTGCGACAT 300
CTCTCGCCAG CTCGCGTCA GCCATGGCTG CGTCAGCAAG ATCCTTGGCA GGTACTACGA 360
GACTGGCAGC ATCCGCGCTG GAGTGATAGG GGGCTCCAAG CCCAAGGTGG CCACCCCCAA 420
GGTGTGGAG AAGATTGGGG ACTACAAACG CCAGAACCCT ACCATGTTTG CTTGGGAGAT 480
CCGAGACCGG CTCCTGGCTG AGGGCGTCTG TGACAATGAC ACTGTGCCCA GTGTGAGCTC 540
CATTAATAGA ATCATCCGGA CCAAAGTGCA GCAACCATTC AACCTCCCTA TGGACAGCTG 600
CGTGGCCACC AAGTCCCTGA GTCCCGGACA CAOGCTGATC CCAGCTCAG CTGTAACTCC 660
CCCGAGTCA CCCAGTGG ATTCCCTGGG TCCACCTAC TCCATCAGT GGTCTCTGG 720
CATCCTCAG CTTGGCAGCG ACAAGAGGAA AATGGATGAC AGTGATCAGG ATAGCTGCGG 780
ACTAAGCAAT GACTCAGAGA CGAGCAGCAG CGGACCCCGA AAGCACTTTC GCACGGATGC 840
CTTCAGCCAG CACCACTCG AGCGCTCGA GTGCCCTTTT GAGCGGCAGC ACTACCCAGA 900
GGCTTATGCC TCCCCAGCC ACACCAAAGG CGAGCAGGGC CTCTACCCGC TGCCCTTGCT 960
CAACAGCACC CTGGAAGAG GGAAGGCCAC CCTGACCCCT TCCACACGCG CACTGGGGCG 1020
CAACCTCTCG AACTCACCAGA CCTACCCCGT GGTGGCAGCT CCGCCCTTTT GBATCTGCAG 1080
CAGGTGCGCT CCGGGTCCC GGCCTTCAAT GCTTTTCCCC ATGCTGCCCT CGTGTACGGG 1140
CAGTTCAGCG GCTCTCAGGG CGAGAGATGG TGGGGCCAC GCTGCCCGGA 1200
TACCCACCCC ACATCCCCAC CAGCGGACAG GGCAGCTATG CCTCTCTGCG CATCGCAGGC 1260
ATGGTGGCAG GAAGTGAATA CTCTGGCAAT GCCTATGGCC ACACCCCTTA CTCCTCTTAC 1320
AGCGAGGCTT GGGCTTCCC CAACTCCAGC TTGCTGAGTT CCCCATATTA TTACAGTTCC 1380
ACATCAGGC CGAGTGACAC GCCCADCACI GCTACGSCCT TTGAOCATCT GTAGTGGCA 1440
TGGGACAGT G

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Seq ID NO: 536 Protein sequence
Protein Accession #: NP_039246

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5 1      11      21      31      41      51
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MPHNSIRSGH GELNQLGGAF VNGRPLPEVV RQRIVDLAHQ GVRPCDISRQ LRVSHGCVSK 60
ILGRYYETGS IRPGVIGGSK PKVATPKVVE KIGDYKRQNP TMFAWEIRDR LLAEGVCDND 120
TVPSVSSINR IIRTKVQPPF NLFMDSCVAT KSLSPGHTLI PSSAVTPPES PQSDSLGSTY 180
10 SINGLLGIAQ PGSDKRMDD SDQDSCLSLI DSQSSSSGPR KHLRTDAFSQ HHLEPLECPF 240
ERQHYPEAYA SPSTTKGEGG LYPLPLINST LDDGKATLTP SNTPLGRNLS THQTYPVVAA 300
PFFWICSKSA PGSPSPMPFP MLFPCTGSSR ARPSSQGERW NGPRCPDTHP TSPPADRAAM 360
PLPSSQAWWQ EVNTLAWEMA TPPTPTARP GASPTPAC

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Seq ID NO: 537 DNA sequence
Nucleic Acid Accession #: NM_003466.1
Coding sequence: 11..1363

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AGGGGCGCTTT GTGAATGGCA GACCTCTGCC GGAAGTGGTC CGCCAGCGCA TCGTAGACCT 120
GGCCACCCAG GGTPTAAGGC CTGCGGACAT CTCTCGCCAG CTCGCGTCA GCCATGGTTG 180
CGTCAGCAAG ATCCTTGSCA GGTACTACGA GACTGGCAGC ATCCGCGCTG GAGTGTATAG 240
GGGCTCCAGG CCCAAGGTGG CCACCCGCCA GGTGGTGGAG AAGATTGGGG ACTACAAAG 300
25 CCAGAACCCT ACCATGTTT CTGGGAGAT CCGAGACCGG CTCCTGGCTG AGGGCGTCTG 360
TGACATGAC ACTGTGCCA GTGTGAGCTC CATTAATAGA ATCATCCGGA CCAAGATGCA 420
GCAACCATTC AACCTCCCTA TGGACAGCTG CTGGCCACC AAGTCCCTGA GTCCCGGACA 480
CACGCTGATC CCGAGCTCAG CTGTAATCC CCAGGAGTCA CCCAGTCCG ATTCCCTGGG 540
CTCCACCTAC TCCATCAATG GGTCTCTGGG CATCGCTCAG CTTGGCAGCG ACAAGAGGAA 600
AATGGATGAC AGTGATCAGG ATAGCTGCGG ACTAAGCATT GACTACAGA GCAGCAGCAG 660
CGSACCCCGA AAGCACTTTC GCACGGATGC CTTCAGCCAG CACCACCTCG AGCGCTCGA 720
GTGCCATTG GAGCGGCGAG ACTACCCAGA GGCTATGCC TCCCCAGCC ACACCAAAGG 780
CGAGCAGGGC CTCTACCCGC TGCCCTTGCT CACAGCACC CTGGACGACG GGAAGGCCAC 840
30 CCTGACCCCT TCCAAACGCG CACTGGGGGG CAACCTCTCG ACTCACAGA CCTACCCCT 900
GGTGGCAGAT CTTACTACAC CTTTCGCCAT AAGCAGGAA ACCCCGAGG TGTCCAGTTC 960
TAGCTCCACC CCTTCTCTT TATCTAGCTC GGCCTTTTGG GATCTGCAGC AAGTCCGCTC 1020
CGGGTCCCG CCTTCCCA TGCTGCTCC GTGTACGGGC AGTTCAGGG 1080
CGAGGCCCTC CTCTCAGGGC GAGAGATGGT GGGGCCCAAG CTGCCCGAT ACCCACCCA 1140
35 CTTCCCAACC AGCGGACAGG GCAGCTATGC CTCTCTGCC ATCGCAGGCA TGGTGGCAGG 1200
AAGTGAATAC TCTGGCAATG CCTATGGCCA CACCCCTTAC TCCTCTTACA GCGAGGCTG 1260
GCGCTTCCCC AACTCCAGCT TGCTGAGTTC CCCATATTAT TACAGTTCCA CATCAAGGCC 1320
GAGTGCAACG CCACCACTG CCACGGCTT TGACCATCTG TAGTTGAAGC TT

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Seq ID NO: 538 Protein sequence
Protein Accession #: NP_003457

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45 1      11      21      31      41      51
   |      |      |      |      |      |
MPHNSIRSGH GELNQLGGAF VNGRPLPEVV RQRIVDLAHQ GVRPCDISRQ LRVSHGCVSK 60
ILGRYYETGS IRPGVIGGSK PKVATPKVVE KIGDYKRQNP TMFAWEIRDR LLAEGVCDND 120
TVPSVSSINR IIRTKVQPPF NLFMDSCVAT KSLSPGHTLI PSSAVTPPES PQSDSLGSTY 180
50 SINGLLGIAQ PGSDKRMDD SDQDSCLSLI DSQSSSSGPR KHLRTDAFSQ HHLEPLECPF 240
ERQHYPEAYA SPSTTKGEGG LYPLPLINST LDDGKATLTP SNTPLGRNLS THQTYPVVAD 300
PHSPFAIKDE TPVSSSSST PSSLSSSAFI DLQVVGSGVP PNAFEMAAS VYQFTGQAL 360
LSGEMVQPT LGGYPPHPT SQGSYASSA IAGMVAGSEY SGNAYGHTPY SBYSEAWRFP 420
NSLLSPFY YSTSPSPAP PTTATADHL

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Seq ID NO: 539 DNA sequence
Nucleic Acid Accession #: NM_006799
Coding sequence: 19..963

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GCGCGCGGAG AGGAGGCCAT GGGCGCGGCG GGGCGCTGCT TGCTGGCGCT GCTGCTGGCT 60
CGGGCTGGAC TCAGGAAGCC GGAGTCGAG GAGGCGGCGC CGTTATCAGG ACCATGCGGC 120
CGACGGGTCA TCACGTGCGG CATCGTGGGT GGAGAGGACG CCGAACTCGG GCGTTGGCGG 180
70 TGGCAGGGBA GCTGCGCCT GTGGGATTC CACGTATGCG GAGTGAGCCT GCTCAGCCAC 240
CGCTGGGCAC TCACGGCGGC GCACTGCTTT GAAACCTATA GTGACCTTAG TGATCCCTCC 300
GGATGGATGG TCCAGTTTGG CCAGCTGACT TCCATGCCAT CCTCTGAG CTTGCAGGCC 360
TACTACACCC GTTACTTCGT ATCGAATATC TATCTGAGCC CTGCTTACCT GGGGAATTCA 420
CCCTATGACA TTGCCTTGGT GAAGCTGTCT GCACCTGTCA CCTACACTAA ACACATCCAG 480
CCCATCTGTC TCCAGGCTTC CACATTTGAG TTGAGAAAC GGACAGACTG CTGGGTGACT 540
GGCTGGGGGT ACATCAAGA GATGAGGCA CTGCCATCTC CCCACACCT CCAGGAAGTT 600
75 CAGGTCCGCA TCATAACAA CTCATGTGC AACCACTCT TCCTCAAGTA CAGTTCCGCG 660
AAGGCATCT TTGGAGACAT GGTGTTGTCT GGCAATGCC AAGGCGGAA GATGCTTGC 720
TTCGTGACT CAGGTGAGC CTGCGCTGT AACAAAGAT GACTGTGTA TCAGATTGGA 780
GTCTGAGCT GGGAGTGGG CTGTGGTGG OCCAATCGG CCGGTGTCTA CACCAATATC 840
AGCCACCTCT TTGATGGAT CCAGAAGCTG ATGGCCAGA GTGGCATGTC CCAGCCAGAC 900
80 CCTCTCTGCT GGTACTCTT TTCTCTCTT CTCTGGCTC TCCACTCTT GGGGCGGTC 960
TGAGGCTACC TGAGCCCATG CAGCCTGGGG CCACGCCAA GTGAGGCCCT GGTCTCTCTT 1020
TGTCTTGTAT GGTAAATAAC ACATTCCAGT TGATGCCTTG CAGGCGATTG TTCAAA

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Seq ID NO: 540 Protein sequence
Protein Accession #: NP_006790

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1	11	21	31	41	51	
MGARGALLLA	LLARAGLRK	PESQEAAPLS	GPCRRRVITS	RIVGGEDABL	GRWPWQGSRLR	60
LWDSHVCVGS	LLSHRWALTA	AHCFETYEDL	SDPSGWMVQF	QQLTSMPSFW	SLQAYYTRYF	120
VSNLYLSPRY	LGNSPYDIAL	VKLSPVTTY	KHIQPICLQA	STFSEFNRTD	CMVTGWGVYK	180
EDEALPSPHT	LQSVQVAILN	NSMCNHLPLK	YSFRKDIPGD	MVCAGNAQXG	KDACFGDSGG	240
PLACNKNGLW	YQIGVVSWGV	GCGRPNRPGV	YTNISHHFEW	IQLKMAQSGM	SQPDPSWELL	300
FFPLLWALPL	LGPV					

Seq ID NO: 541 DNA sequence
Nucleic Acid Accession #: NM_014344
Coding sequence: 131..1444

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TCGCGCGCGG	GACCCGGGTG	CCTGGGCTCG	GCTTGAAGCG	GCGCGCGCGC	ACCGGCACAG	120
CCGCGGGAGC	ATGGGAGGGA	GGATGCGGGG	CGCGCGCGCC	ACCGCGGGGC	TCTGGCTGCT	180
GGCGCTGGCG	TGCTGCTGGG	CGCTGTGGGG	AGGGCTCCTG	CGCGCGCGGA	CGAGCTGCTC	240
CGCTCCCGG	CGCCCGCAAG	ACCGACTCCC	ACGGCGCCCG	GCCCGGAGCG	GCGGCCCGCG	300
GCCCGCGCCT	CGCTTCCCTC	TGCCCGCGCC	CCTGGCGTGG	GAGCGCCCGG	GCBCCTCCCT	360
GAAGAACTTC	CGGGCGCTGC	TCACCTCTGC	GGCGCGCGCG	GACGGCCCGC	CCCGGCAGTC	420
CCGAGGCGAG	CCGAGCTGGC	ACGTGTGAGC	CAGGCAAGCC	CGCGCGGAGG	AGAGCGCGCG	480
GGTGACCGGG	GGCGCTTCTT	GGAGCGCGCG	CCTGGAGGAG	CAGGTGCCCG	CGGGCTTTTC	540
GGAGGCCGAG	GCGCGCGCGT	GGCTGGAGGC	GGCTCGCGCG	GCCCGGATGG	TGGCCTTGGG	600
GCGCGGGGGT	TGCGGGGCGA	GCTCCAAACG	ACTGGCCCGT	TTTGGCGAGG	GCACCCGCGC	660
CTGCGTGGCG	TAGCGCATCA	ACCGGGAGCA	GATTCAGGGC	GAGGCCCTGT	CTTACTATCT	720
GGCGCGCTCG	CGGGCGCTCC	AGCGCCAGGT	GCGCGCGCTG	GCACTGGCTC	GGGTGGAGGC	780
TGCGGGCGCG	CAGTGCGCGC	AGGTGCAAGG	GGAGCTGCGC	GCTGCGCACT	GGACCGAGGG	840
CAGCGTGGTG	AGCTTGACAC	GCTGGCTGCC	CAACTCAACG	GACGTGGTGG	TGCCCGCGCG	900
CTGGCGCTCG	GAGGACGCGC	GTCTGCGCCC	CCTCCGGGAT	GCGGGGGGTG	AGCTGGCCAA	960
CCTCAGCCAG	CGGGAGCTGG	TGGAACTAGT	ACAATGGAGC	GACTTAATCC	TTTTGACTTA	1020
CTGACGCGCC	AACCTCGACC	AGCTCGTAAG	CAACTCTTTC	AGCTTCAGT	GGGACCCGCG	1080
CGTCATGCGC	CGTGCCACCA	GCAACCTGCA	CGCGGTGCGG	GCGGGGCGCG	TGGTCTTTCT	1140
GGACCAATAG	GCGGGCTTGG	TGCACGGCTA	CCGGGTAGCA	GGCATGTGGG	ACAAGTATAA	1200
CGAGCGCGTG	TGCGAGTCAG	TGTGGGTGTT	CCGCGAGCGG	ACGCGCGCGC	GCGTCTCGGA	1260
GCTGACCGCG	GGACGAGAGG	CGCGCGCGCG	GCTGCTGCGC	CTCTACCGGC	GCCACGAGCC	1320
TGCTTCCCGC	GAGCTGCGCG	CCCTTGAGCA	CCCCACGCTC	CAGCTGCTAC	AGCGCGCGCT	1380
CGAATCTCCT	GCCAGGACCA	TTTTGCACTG	TAAGGCCAAG	TACGGCGCGC	GGTCTGGGAC	1440
TGAGTGTGAC	CGGGAGGAAA	AGAGAGAGAT	CTGGGGCTGG	GGTATGGATG	ATGGGGGAAA	1500
GGGCGGTGCG	CTCTGCCACT	GTGAGGAGCC	AGCGCGCCAA	CGCCACCCCG	CAAAGGTGTC	1560
TAAAGAACTC	AGCTTTTCAC	CCACTGCCCC	CTTCTTTTCA	ATCCACGCTC	GTTCCTTTTC	1620
AAAGTTCTGG	GAGGAGCAAC	TCACCGAGGC	GAGAGAGTGA	ACATTCTCTC	CAGCCAGCTC	1680
ATAAAGAGAT	TCCTTACTGT	GCCAGCAGCG	GGATTGGATC	CGAAGAAACT	GGCTACTGGG	1740
GTCTGGCGCC	CGGGTGGCGG	TCCTGTGGGG	AGATGCACCC	CATTCTTGCG	CCCCCTCAT	1800
TCCTTTTCCG	AAAAAGGAAA	ACTTGGGTTT	GAGCGGTGGA	GCTAATTCCTG	CAATTTTCTA	1860
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CTGTGTTCTC	CCCTTGTTCC	AGCGCGCGGA	TGGTGAGATC	ACTGTTCCAA	CGAGGGGGAC	1980
GGCTCGCGAT	GAGCAAAAGA	GAGCAGGACC	TCCAGACTCT	GGGGAGCCCT	GCAGACCTTG	2040
ACAAATTTGC	TGACTCATTC	CTGACCTCTT	GTCAATTTGG	CCTGAGGGCT	ACAAATTCAG	2100
GGTCACTGCT	ATGCACTAAG	TCAAATAATG	AATTTCTTCC	TCCTCTCTCG	AACCGACCRA	2160
AATTTTGACA	ACGATGATGT	TCACCAAGAG	GAAGAAAAAA	TCAGTTTAT	GCACTTTAT	2220
TGTTTGTGAT	TTTCAATTTT	TATTAAGAAA	AAATTTTAT	TTACAGAAAT	TACCTTCTCT	2280
GTATATATGT	GCATAAAGTG	TGGTGTAAT	ATACTAAACA	AACCTATATT	TCATTAAGAG	2340
GGAGTTTAAA	ATTTAAAAAA	AAAAAAA				

Seq ID NO: 542 Protein sequence
Protein Accession #: NP_055159

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RPFLPPPLAW	DARGGSLKTP	RALLTLAAGA	DGPPRQSRSE	PRWHVSRQPF	HPKESAAVHG	120
GVFWRGLEEG	QVPPGFSEAR	AAAWLEAARG	ARMVALERGG	CGRSENRLAR	FADGTRACVR	180
YGINPEQIQG	EALSYLLARL	LGLQRHVPEL	ALARVEARGA	QMAQVQSELR	AAHWTBGSVV	240
SLTRNLPLNT	DVVVFPAPWS	EDGRILPLRD	AGGELANLSQ	AELVDLVQNT	DLILFDYLT	300
NFDRLVSNLF	SLQNDPRVMQ	RATSNLHRGP	GGALVFLDNE	AGLVHGYRVA	GMWDKYNBPL	360
LQSVCFRFR	TARRVLELHR	GQDAARLLLR	LYRBHEPRFP	ELAALADPHA	QLLQRRLDPL	420
AKHILHCKAK	YGRRBGT					

Seq ID NO: 543 DNA sequence
Nucleic Acid Accession #: XM_007652.4
Coding sequence: 1..1290

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CTGTTTTTAA	ATGACACACG	CGCTTTTGAC	TTCTCGGATG	AGCGCGGGGA	CGAGGGGCTT	120
TCTCGGTTCA	ACAAACTTCG	AGTTGTGGTG	GCCGATGACG	GTTCGGAAGC	CCCGGAAGAG	180
CCGTGTTAAG	GGGCGCACCC	GACCTCCAG	GCGACGATG	ATTCTCTACT	GGACCAAGAC	240
TTACCTTTGA	CCACACATCA	GCTGAGTTTG	AAGGTGAGCT	CCTGTGACAA	CTGCAGCAAA	300
CAGAGAGAGA	TACTGAAGCA	GAGAAAGGTG	AAAGCCAGGT	TGACCATTGC	TGCGGTTCTG	360
TACTTGCTTT	TCATGATTGG	AGAATTGTA	GGTGGATACA	TGCAAAATAG	CCTAGCAATC	420

5 ATGACAGATG CACTTCATAT GTTAACTGAC CTAAGCGCCA TCATACTCAC CCTGCTTGCT 480
 TTGGGGCTAT CATCAAAATC ACCAACCCAA AGATTACCTT TTGGATTTC TCCCTTAGAG 540
 GTTTTGTGAG CTATGATTAG TGTGCTGTTG GTGTATATAC TTATGGGATT CCTCTTATAT 600
 GAAGCTGTGC AAAGAAGTAT CCATATGAAC TATGAATATA ATGGAGATAT AATGCTCATC 660
 ACCGACGCTG TTGGAGTTGC AGTTAATGTA ATAAATGGGGT TTCTGTTGAA CCACTCTGGT 720
 CACCGTCACT CCATTCCTCA CTCCCTGCTT TCAAATTCCT CTACCCAGAGG TTCTGGGTGT 780
 GAACGTAAAC ATGGGCAGGA TAGCCTGGCA GTGAGAGCTG CATTTGTACA TGCTTTGGGA 840
 GATTGTGTAC AGAGTGTGG TGTGCTAATA GCTGCATACA TCATACGATT CAAGCCAGAA 900
 TACAAGATTG CTGATCCCAT CTGTACATAC GTATTTTCAT TACTTGTGGC TTTTACAACA 960
 10 TTTGGAATCA TATGGGATAC AGTAGTTATA ATACTAGAAG GTGTGCCAAG CCATTGGAAT 1020
 GTAGACTATA TCAAGAAGAC CTGTATGAAA ATAGAAGATG TATATTCACT CGAAGATTTA 1080
 AATATCTGGT CTCTCACTTC AGGAAAATCT ACTGCCATAG TTCACATACA GCTAATTCCT 1140
 GGAAGTTCAT CTAATGGGGA GGAAGTACAG TCCAAAGCAA ACCATTATT ATTGAACACA 1200
 15 TTTGGCATGT ATAGATGTAC TATTCAGCTT CAGAGTTACA GGCAAGAAGT GGACAGAACT 1260
 TGTGCAAAAT GTGAGAGTTC TAGTCCCTGA

Seq ID NO: 544 Protein sequence
 Protein Accession #: XP_007652.1

20 1 11 21 31 41 51
 MAGGSAWKRL KSMRLKDDAP LFLNDTSAPD FSDEAGDEGL SRFNKLKRVV ADDGSEAPER 60
 PVNGAHPFLQ ADDDSLLDQD LPLTNSQLSL KVDSCDNCSK QREILKQKRV KARLITAAVL 120
 25 YLLFMIGELV GGYIANSLAI MTDALHMLTD LSAILILTLA LMLSSKSPTK RPTFGPHRLZ 180
 VLSAMISVLL VYILMGFLLY EAVQRTIEMN YEINGDMLGI TAAVGVAVNV IMGFLINQSG 240
 HRSRSHSESLP SNSEPTSGSGC EENHGQD9LA VRAAFVHALG DLVQSVGLI AAYIIRFKPE 300
 YKIADPICY VFLSLVAFIT FRIINDTVVI ILEGVPSHLN VDYIKSALMK IEDVYSVEDL 360
 NINSLTSGKS TAIVHQLIP GSSSKNEKVQ SKANHLLINT PGMYRCITQL QBYRQEVDR 420
 CANCQ888P

Seq ID NO: 545 DNA sequence
 Nucleic Acid Accession #: AB037765.1
 Coding sequence: 1..2478

35 1 11 21 31 41 51
 ATGTTTTCOG GCTTCAATGT CTTTAGAGTT GGGATCTCIT TTGTCATAAT GTGCATTTT 60
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 40 CAACCAAGAA AAGCCTCTTT AGCTTATTTT TGTCAAGCTG ATTCCCAAG AACATCTGTA 180
 TTTCTTGAAG AACTGAATGA GGCTGTTAGA CCTCTGAGG ACTATGGAAT TTCAGTTGCC 240
 AAGGTATATT GTGTCAAGA AGAATATCA AGATACTGTG GAAAGAGAAA GGATTTGATG 300
 AAAGCATATT TATTCAAGGG CAACATATTG CTCAGAGAAT TCCCTACTGA CACCTTGT 360
 GATGTGAATG CCATTGTGCG CCATGTCTCT TTTGCTCTTC TTTTAGTGA AGTGAATAT 420
 45 ATTACCAACC TGAAGACCT TCAGACATA GAAATGCTC TGAAGAGAA AGCAATATT 480
 ATATCTCAT ATGTAAGAGC CATTGGAATA CCAGAGCACA GAGCAGTCAAT GGAAGCCGCT 540
 TTTGTGTATG GAGTACATA CCATTTGTCT TTAACCAAG AAATTGCCCT TTTGGAAGT 600
 ATTGGCTCTG AGGATGTGGA ATATGCACAT CTCTACTTTT TTTATGTGTA ACTAGTCTTG 660
 GACTGACCC AGCAATGTAG AAGAACATA ATGGAACAGC CATTGACTAC ACTGAACATT 720
 50 CACCTGTTTA TTAAGCAAT GAAAGCACCT CTGTTGACTG AAGTTGCTGA AGATCTCAA 780
 CRAATTTCAA CTGTCCACT CTCACTGGGC TTACCACTGG TTTTATGTGT TAGCCACAG 840
 GCTACTTATG AAGCTGATAG AAGAACTGCA GAATGGGTG CTGCGCTCT TCTGGGAAA 900
 GCAGGAGTTC TACTCTTGT AAGGGACTCT TTGGAAGTGA ACATTCCTCA AGATGCTAAT 960
 GTGGTCTTCA AAGAGCAGA AGAGGGAGTT CCAGTGGAA TTTTGGTATT ACATGATGTT 1020
 55 GATTTAATAA TATCTCATGT GGAATAATAT ATGCACATT AGGAATACA AGAAGATGAA 1080
 GACAAATGACA TGAAGGTCC AGATATAGAT GTTCAGGATG ATGAAGTGGC AGAATCTGTT 1140
 TTCAGAGATA GGAAGAGAAA ATTACCTTTG GAACCTACAG TGAACCTAAC AGAAGAAACA 1200
 TTTAATGCAG CAGTGTATGG TTCTGACAGC ATAGTACTCT TCTATGCTGG TTGCAAGCA 1260
 GTATCCATGG CATTTTGTGA ATCTATATT GATGTGCGAG TTAACCTGAA AGGCACATCT 1320
 60 ACTATGCTTC TTACTAGAA AACTGTGCA GATTGCTCTG ATGTATGTAC TAAGCAAAAT 1380
 GTTACTGAAT TTCCTATCAT AAAGATGTAC AAGAAAGGCG AGAACCAGT ATCTTATGCT 1440
 GGAATGTATG GAACGAGAA TCTCTTAAA TTTATCCAGC TCACAGGAT TTCATATCCA 1500
 GTGAATATAA CATCGATCCA AGAAGCAGAA GAATATTTAA GTGGGGAATT ATATAAGAC 1560
 CTCATCTGT ATTCTAGTGT GTCTAGTATT GGACTATTTA GTCCAACCAT GAAACAGCA 1620
 65 AAAGAAGATT TTAGTGAAGC AGGAACCTAC CTAAAGGAT ATGTTATCAC TGAATTTAT 1680
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 CTTGCCAGAC ACACGAGAGG CAAATATAG AGCATCCAC TAGCTAGCAC ACATGCACAA 1800
 GACATAGTTC AAATAATAAC AGATGCACTA CTGGAATGT TTCCGGAAAT CACTGTGGAA 1860
 AATCTTCCCA GTTATTTAG ACTTCAGAAA CCATTATTGA TTTTGTTCAG TGATGGCACT 1920
 70 GTAAATCTCT AGTATATAAA AGCAATATTG ACCTGGTAA AGCAGAAATA CTTGGATICA 1980
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 75 CCTCCTCTTC CAGCTTATGA TTTTCTAAGT ATGATAGATG CCGCAACATC TCAACGTGGC 2280
 ACTAGGAAAG TTCCCAAGTG TATGAAAGAA ACAGATGTGC AGGAGAAATG TAAGGAACAA 2340
 CATGAAGATA AATCGGCAGT CAGAAAAGAA CCBATTGAAA CTCTGAGAAAT AAGCATTGG 2400
 AATAGAAGTA ATTGGTTTAA AGAAGCAGAA AAATCATTTA GACGTGATAA AGAGTTAGGA 2460
 TGCTCAAAAG TGAACATA

Seq ID NO: 546 Protein sequence
 Protein Accession #: BAA92582.1

1 11 21 31 41 51

5 MFSGFNVFRV GISFVIMCTF YMPVTNSLPE LSPQKYFSTL QPGKASLAYF CQADSPRTSV 60
 FLEELNEAVR PLQDYGISVA KVNVCKEEIS RYCGKEKDIM KAYLFKGNIL LREFPTDTLF 120
 DVNAIVAHVL FALLEFSEVKY ITNLEDLQNI ENALKGKANI IFSYVRAIGI PEHRAVMEAA 180
 FVYGITYQFV LTTBIALLES IGSEDVEYAH LYFFHCKLVL DLTQQCRRTL MBQLPTLINT 240
 HLFIKTMKAP LLTEVASEDPQ QVSTVHLQLG LPLVFIVSQQ ATYEADRRTA EWMVWRLLGX 300
 AGVILLLRDS LEVNIPQDAN VVFKRAEEGV PVEPLVLHDV DLIISSVENN MHIEEIQEDE 360
 DNDMEGPDID VQDDEVAETV FRDRKRKLFL ELTVELTEET FNATVNASDS IVLIFYAGWQA 420
 VSMATLQSYI DVAVKLKGTG TMLLTRINCA DMSDVCTKQN VTEFPIIRMY KKGPNVBYA 480
 GMLGTEDLLK PIQLNRISYP VNITSIQEA EYLGGELYKD LILYSSVSVL GLFSPTMKTA 540
 10 KEDFSEAGNY LKGYVITGIY SEEDVLLST KYAASLPALL LARHTGKIE SIPLASTHAQ 600
 DIVQIITDAL LEMFPEITVE NLPSYFRLQK PLLILFSDGT VNPQYKQAIL TLVKQKYLDS 660
 FTFCHNLNEN TFWGRGILRA YFDPLPLPL LVLVNLHSGG QVFAFSPDQA IIBENLVWL 720
 RKLEAGLENH ITILPAQEWK PPLPAYDFLS MIDAATSORG TRKVPKCKE TUVQENDKRE 780
 15 HEDKSAVRKE PIETLRIRHW NRSNWFKEAE KSFRRDKELG CSKVN

Seq ID NO: 547 DNA sequence

Nucleic Acid Accession #: NM_033102.1

Coding sequence: 1..1662

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 25 CCTCTGCTGC TGAAGTGGG GGTAGAGGAG AGATTCTATG CCATGGTGCT GGGCAITGGT 180
 CCAGTGTCTG GCTGGTCTG TGTCCGCTC CTAGGCTCAG CCAGTGACCA CTGGCGTGA 240
 CGCTATGGCC GCGCCCGGCC CTTTCATCTG GCACTGTCTT TGGGCATCCT GCTGAGCCTC 300
 TTTCATCATC CAAGGGCGGG CTGGCTAGCA GGGCTGCTGT GCGCGATCC CAGGCCCTG 360
 GAGCTGGCAC TGCTCATCTT GGGCGTGGGG CTGCTGGACT TCTGTGGCCA GGTGTGCTTC 420
 30 ACTCCACTGG AGGCCCTGCT CTCGACCTC TTCCGGGACC CGGACCACTG TCGCCAGGCC 480
 TACTCTGTCT ATCTCTTCAT GATCAGTCTT GGGCGCTGCC TGGGCTACCT CCGCCCTGCC 540
 ATTGACTGGG ACACCACTGC CCGTGGCCCC TACCTGGGCA CCCAGGAGGA GTGCTCTTT 600
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 GCAGCGCTGG GCGCCACCGA GCGAGCAGAA GGGCTGTCCG CCGCTCTCTT GTGCCCCAC 720
 35 TGCTGTCCAT GCGCGCGCCG CTGCGCTTTC CGGAACCTGG GCGCCCTGCT TCCCGGCTG 780
 CACCGACTGT GCTGCGCGAT GCGCGCGACC CTGCGCGGCC TCTTGTGGGC TGAGCTGTGC 840
 AGCTGGATGG CACTCATGAC CTTCACTGCT TTTTACAGG ATTTCTGTGG CGAGGGGCTG 900
 TACCGAGGCG TGCCGAGAGC TGAGCGCGGC ACOGAGGCCC GGAGACACTA TGATGAGGCG 960
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 40 GTCATGACC GGCTGGTCA GCGATTGCG ACTCGAGCAG TCTATTGGC CAGTGTGGCA 1080
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 TCAGCGCGCC TCACCGGGTT CACCTTCTCA GCGCTGCAGA TCTGTCCCTA CACTGTGGC 1200
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 AGGTGTGTTT CCGCGCGGGG CATCTGCGCT GACCTCGCCA TCTGTGATAG TGCGTCTCTG 1500
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 50 ACTGCTATA TGGTGTCTGC CGCAGGCTG GGTCTGTGTC CATTTACTT TGCTACACAG 1620
 GTAGTATTG ACAAGACGA CTTGGCCAAA TACTAGCGT GA

Seq ID NO: 548 Protein sequence

Protein Accession #: NP_149093.1

55 1 11 21 31 41 51
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 MVQRLWVSR LRRKQALL VMLTFGLEV CLAAGITYVP FLLEVGVEE KFMNVLGIG 60
 PVLGVCPVL LGSASDHWG RYRRRPFIW ALSGLLSL FLIPRAGILA GLCPDPRPL 120
 ELALLLGVG LDFCQVCF TPEALLSDL PRDPDHCRA YSVYAFMISL GGCLGYLLPA 180
 60 IDMTSALAP YLGTQECLE GLLTLIFLTC VAATLLVAEE AALGPTEPAE GLSAPSLSPH 240
 CCPCRARLAF RNLGALLPRL EQLCCRMPT LRLLFVAELC SNMALMTITL FYTDFVGEGL 300
 YQGVRAEPG TRARRHYDEG VRMGSLGFL QCAISLVFSL VMDRLVQRFQ TRAVYLASVA 360
 APPVAAGATC LSHSVAVVTA SAALTGTFIS ALQILFYTLA SLVHREKQVF LPKYRGDTGG 420
 ASSEDSLMTS FLGPKPGAP PFNGHVAGG SGLLPPFPAL CGASACDSV RVVVGEPTFA 480
 65 RVVPRGICL DLAILDSAPL LQVAPSLFM GSIVQLSQSV TAYMVAAGL GLVAIYPATQ 540
 VVEDKSLAK YSA

Seq ID NO: 549 DNA sequence

Nucleic Acid Accession #: Eos sequence

Coding sequence: 1..1389

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 75 GTTGTCAACT CGATTATAGC ATCTGGTATA ATAGGATTGC CTTATTCAAT GRAGCAAGCT 180
 GGGTTTCTT TGGGAATAT GCTTTTATTC TGGGTTTCAT ATGTTACGGA CTTTCCCTT 240
 GTTTTATGA TAAAGAGAGG GCGCTCTCT GGAACAGATA CCTACCAGTC TTGTGTCAT 300
 AAACTTTTG GCTTTCAGG GTATCTGCTC CTCTCTGTTT TCAGTTTT GTATCCTTT 360
 80 ATAGCAATGA TAAGTACAA TATAATAGCT GGAGATACTT TGAGCAAGT TTTTCAAGA 420
 ATCCAGGAG TTGATCTGA AAACGTGTTT ATTGGTCGCC ACTTCATTAT TGGACTTTC 480
 ACAGTACCT TACTCTGCC TTTATCTTTC TACCGAATA TAGCAAGCT TGGAAAGGTC 540
 TCCCTCATCT CTACAGTTT AACAACTCTG ATCTTGGAA TTGTAATGTC AAGGGCAATT 600
 TCACGGGCTC CACACATACC AAAACAGAA GACGCTTGGG TATTTCGAA GCCCAATGCC 660
 ATTCAAGCG TCGGGTGTAT GCTTTTGA TTTATTGACC ACCATAACT CTTCTTAGTT 720

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TACAGTTCTC TAGAAGAACC CACAGTAGCT AAGTGGTCCC GCCTTATCCA TAIGTCCATC 780
GTGATTTCTG TATTATCTCG TATATCTTT GCTACATGTG GATACTTGAC ATTTACTGGC 840
TTCACCCCAAG GGGACTTATT TGAATAATAC TGCAGAAATG ATGACCTGGT AACATTGGGA 900
AGATTTTGTT ATGGTGTGAC TGTCATTTTG ACATACCCCTA TGGAAATGCTT TGTGACAAGA 960
GAGGTAATG CCAATGTGTT TTTTGGTGGG AATCTTTTCAT CGGTTTTCCTA CATGTGTGTA 1020
ACAGTGATGG TCATCAGTGT AGCCACGCTT GTGTCTTTCG TGATTGATTG CCTCGGGATA 1080
GTCTAGAAC TCAATGGTGT GCTCTGTGCA ACTCCCTTCA TTTTATCAT TCCATCAGCC 1140
TGTTATCTGA AACTGTCTGA AGAACCAAGG ACACACTCCG ATAAGATTAT GTCTTGTGTC 1200
ATGCTTCCCA TTGGTGTGCTG GTGATGGTT TTTGGATTGG TCATGGCTAT TACAAATACT 1260
CAAGACTGCA CCCATGGGCA GGAATGTTC TACTGCTTTC CTGACAAATT CTCTCTCACA 1320
AATACTCAG AGTCTCATGT TCAGCAGACA ACACAACTTT CTACTTTAAA TATTAGTATC 1380
TTTCAATGA

Seq ID NO: 550 Protein sequence
Protein Accession #: Eos sequence

1 11 21 31 41 51
MGYQRQEPVI PPQRDLDDRE TLVSEHEYKE KTCQSAALFN VVNSIIGSGI IGLFYSMKQA 60
GPPLGILLLF WVSIVTDFSL VLLIKGALS GTDTYQSLVN KTFGFPQYLL LSVLQFLYPF 120
IAMISYNIA GDTLSKVQR IPGVDPENVF IGRHFIIIGLS TVTFTLPLSL YRNIAKLGKV 180
SLISTGLTLL ILGIVMARAI SLGPHIPKTE DANVFAKPNA IQAVGVMSFA FICHNSFLV 240
YSSLEPTVA KMSRLIHMSI VISVFICIFF ATCGYLTFTG FTQGDLPENY CRNDDLVTFG 300
RFCYGVTVIL TYPMECFVTR EVLAVVFFGG NLSSVFHIV TVMVITVATL VSLLDCLGI 360
VLELNGVLC TPLIFLIPSA CYLKLSEPR THSDKIMSCV MLPIGAVVMV PGFVMAITNT 420
QDCTGQEMF YCFDFNFSLT NTSSSHVQOI TQLSTLNISI EQ

Seq ID NO: 551 DNA sequence
Nucleic Acid Accession #: Eos sequence
Coding sequence: 1..1284

1 11 21 31 41 51
ATGGGCTACC AGAGGCAGGA GCCTGTCATC CCGCCGCAGA GAGGATTGCC TTATTCAATG 60
AAGCAAGCTG GGTTCCTCTT GGGAAATATG CTTTATCTCT GGGTTTCATA TGTACAGAC 120
TTTTCCCTTG TTTTATGAT AAAAGGAGGG GCCCTCTCTG GAACAGATAC CTACCAGTCT 180
TTGTCACATA AACTTCTCG CTTCCAGGG TATCTGCTCC TCCTGTCTCT TCAGTTTTTG 240
TATCCTTTTA TAGCAATGAT AAGTACAAT ATAATAGCTG GAGATACTTT GAGCAAGATT 300
TTTCAAGAA TCCAGGAGT TGATCCTGAA AACGTGTTTA TTGGTCGCCA CTTTATTATT 360
GGACTTTCCT CAGTTACCTT TACTCTGCCT TTATCCTGT ACCGAAATAT AGCAAGCTT 420
GGAAAGGTCT CCTCATCTTC TACAGTTTA ACAACTCTGA TTCTTGAAT TGTAAATGGCA 480
AGGGCAATTT CACTGGGTCC ACACATACCA AAAACAGAAG ACGCTTGGGT ATTTGCAAG 540
CCCAATGCCA TTCAAGCGGT CGGGTTATG TCCTTTGCAT TTATTGCGCA CCATAACTCC 600
TTCTAGTTT ACAGTTCTCT AGAAGAACC ACAGTAGCTA AGTGGTCCCG CCTTATCCAT 660
ATGTCCATCG TGATTTCTGT ATTTATCTGT ATATCTCTTG CTACATGTGG ATACTTGACA 720
TTTACTGGCT TCACCAAGG GCACTTATT GAAATTTACT GCAGAAATGA TGACCTGGTA 780
ACATTTGGAA GATTTTGTGA TGGTGTCACT GTCATTTTGA CATACCTTAT GGAATGCTTT 840
GTGACAAAG AGGTAATGTC CAATGTGTT TTTGGTGGGA ATCTTTCTAT GGTATTCCAC 900
ATGTGTGTA CAGTGTGCT CATCACTGTA GCCACGCTTG TGTCTGCTCT GATTGATTGC 960
CTCGGGATAG TTCTAGAACT CAATGCTGTG CTCTGTGCAA CTCCTTCAT TTTTATCATT 1020
CCATCAGCTT GTTATCTGAA ACTGTCTGAA GAACCAAGGA CACACTCCGA TAAGATTATG 1080
TCTGTGTCA TGCTTCCCAT TGGTCTCTG GTGATGGTTT TTGGATTCCT CATGGCTATT 1140
ACAAATACTC AAGACTGCAC CCATGGGAG GAAATGTCT ACTGCTTCC TGACAATTTC 1200
TCTCTCACA ATACCTCAGA GTCTCATGTT CAGCAGACA CACAACCTTC TACTTTAAT 1260
ATTAGTATCT TTAACCTCGA GTAA

Seq ID NO: 552 Protein sequence
Protein Accession #: Eos sequence

1 11 21 31 41 51
MGYQRQEPVI PPQRGLFYSM RQAGFLGIL LLFWVSIVTD FSLVLLIKGG ALSGDTYQ8 60
LVNKTFFGPG YLLSLVQLFL YPFIAMISYN IAGDTLSKV PQRIPGVDFE NVFGRHFII 120
GLSTVFTFLP LSLYRNIAKL GKVSLLSTGL TLLILGIVMA RAISLPHIP KTEDANVFAK 180
PNAIQAVGVMS SFAPICHNS FLVYSSLEEP TVAKNSRLIH MSIVISVFIC IFFATCGYLT 240
FTGFTQGDLE ENYCRNDDLVT TFRGPCYGV VILTYPMECT VIREVIANVF PGQNLSSVPR 300
IVVTVMVITV ATLVSLLIDC LGIVLELNGV LCATPLIFII PSACYLKLSE EPRTHSDKIM 360
SCVMPLIGAV VMVPGFVMAI TNTQDCTBQ EMFYCFPDNF SLTNTSSSHV QQTITQLSTLN 420
ISIFQLE

Seq ID NO: 553 DNA sequence
Nucleic Acid Accession #: Eos sequence
Coding sequence: 1..1203

1 11 21 31 41 51
ATGGGCTACC AGAGGCAGGA GCCTGTCATC CCGCCGCAGT TTTCCCTTGT TTTATTGATA 60
AAGGAGGGGG CCTCTCTCG AACAGATACC TACCAGTCTT TGGTCAATAA AACTTTCGGC 120
TTTCCAGGT ATCTGCTCTT CTCTGTCTT CAGTPTTGT ATCCTTTTAT AGCAATGATA 180
AGTTACATA TAATAGCTGG AGATACTTTG AGCAAGTTT TTCAAAGAA CCCAGGAGTT 240
GATCCTGAAA ACGTGTATT TGGTCGCCAC TTCATTATTG GACTTTCAC AGTTACCTTT 300
ACTCTGCTT TATCCTTTGA CGAAATATA GCAAGCTTG GAAAGGTCTC CCTCATCTCT 360
ACAGGTTTAA CAATCTCAT TCTTGAAT GTAAATGCAA GGGCAATTTC ACTGGGTCCA 420
CACATACCAA AAACAGAAGA CGCTTGGGTA TTGCAAGC CCAATGCCAT TCAAGCGGTC 480

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GGGGTTATGT CTTTTCGATT TATTTCGCCAC CATAACTCCT TCITAGTTTA CAGTTCCTTA 540
GAAGAACCCA CAGTAGCTAA GTGGTCCCGC CTTATCCATA TGTCCATCGT GATTTCGTGA 600
TTTATCTGTA TATTCCTTGC TACATGTGGA TACTTGACAT TTACTGGCTT CACCCAAGGG 660
GACTTATTG ARAATTACTG CAGAAATGAT GACCTGGTAA CATTGGGAAG ATTTTGTATT 720
GGTGTCACTG TCATTTTGAC ATACCCTATG GAATGCTTTG TGACAAGAGA GGTAAATGOC 780
AATGTGTTT TTGGTGGGAA TCTTTCATCG GTTTCACACA TTGTTGTAAC AGTGATGGTC 840
ATCACTGTAG CCACGCTTGT GTCAATTGCTG ATTGATTGCC TCGGGATAGT TCTAGAACTC 900
AATGGTGTGC TCTGTGCAAC TCCCTCATTT TTTATCATTC CATCAGCCTG TTATCTGAAA 960
CTGTCTGAAG AACCAAGGAC ACACCTCCGAT AAGATTATGT CTGTGTGCAT GCTTCCCATTT 1020
GGTGTCTGCG TGATGTTTTT TGGATTGCTC ATGGCTATTA CAAATACTCA AGACTGCACC 1080
CATGGGCAGG AAATGTTCTA CTGCTTTCCT GACAATTTCT CTCTCACAAA TACCTCAGAG 1140
TCTCATGTTT AGCAGACAAC ACAACTTTCT ACTTAAATA TTAGTATCTT TCAACTCGAG 1200
TAA

Seq ID NO: 554 Protein sequence

Protein Accession #: Bos sequence

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MGYQRQEPVI PPQFSLVLLI KGGALSGTDT YQSLVNKTFG FPGYLLLSVL QFLYPFIAMI 60
SYNIAGDTL SKVFQRIPIV DPENVFIGRH FIIGLSTVTF TLPLSLYRNI AKLQKVSLSL 120
TGLTLLILGI VMARAIISLG EIPKTEDAWV FAKPNAIQAV GVMSFAPICH ENSFLVYSSL 180
EPTVAKNSR LIHMSIVISV FICIFPATCG YLFTGTFTQG DLPENYCRND DLVTFGRFCY 240
GVTVILTYPM ECFVIREVIA NVFFPGNLSS VEHIVVTVMV ITVATLVSLI IDCLGIVLEL 300
NGVLCATPLI FIIPBACYLK LSEKPRTHSD KIMSCVMLPI GAVVMVGFV MAITNTQDCT 360
HGQEMFYCFP DNPFLTMTSE SHVQQTQLS TLNISIFQLE

Seq ID NO: 555 DNA sequence

Nucleic Acid Accession #: Bos sequence

Coding sequence: 1..1140

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	GATCGCTACG	GAGAGCTGGA	CTTACCGGGG	GCCGGCCGCA	AGCACAGCAA	TTTCTCTCGG	900
	CTCTCTGACC	GAACGGATCC	AGCTGCAGTT	TATAGTCTGG	TCACACGCAC	ATGGGGCTTC	960
	CGTGCCCGGA	ACCTGTGTGT	GTCACTGCTG	GGGGGATCGG	GGGCCCCCGT	CCTCCAGACC	1020
	TGGCTGCGAG	ACCTGCTGCG	TGCTGGGCTG	GTGCGGGCTG	CCCAGAGCAC	AGGAGCCCTGG	1080
	ATTGTCACTG	GGGTGTCTGCA	CACGGGCATC	GGCCGGCATG	TTGGTGTGGC	TGTACGGGAC	1140
	CATCAGATGG	CCAGCACTGG	GGGCACCAAG	GTGGTGGCCA	TGGGTGTGGC	CCCCTGGGGT	1200
10	GTGGTCCGGA	ATAGAGACAC	CCTCATCAAC	CCCAAGGGCT	CGTTCCTGCG	GAGGTACCGG	1260
	TGGGCGGGTG	ACCGCGAGGA	CGGGGTCCAG	TTTCCCTCGG	ACTACAACCTA	CTCGGCTTTC	1320
	TTCTCTGGTG	ACGACGGCAC	ACACGGCTGC	CTGGGGGGCG	AGAACCGCTT	CCGCTTGGCG	1380
	CTGGAGTCTT	ACATCTCACA	GCAGAAGACG	GGCTTGGGAG	GGACTGGAAT	TGACATCCCT	1440
	GTCTCTGCTC	TCTGATTTGA	TGGTATGAG	AAGATGTTGA	CGGGAATABA	GAACCCCAAC	1500
15	CAGGCTCAGC	TCCCATGTCT	CCTCGTGGCT	GGCTCAGGGG	GAGCTGCGGA	CTGCTGGGCG	1560
	GAGACCTCGG	AAGACACTCT	GGCCGCCGGG	AGTGGGGGAG	CCAGGCAAGG	CGAAGCCCGA	1620
	GATCGAATCA	GGCGTTCTT	TCCCAAGGGG	GACCTTGAGG	TCTTCGAGGC	CCAGGTGGAG	1680
	AGGATTATGA	CCCGGAAGGA	GCTCTTGACA	GTCTATTCTT	CTGAGGATGG	GTCTGAGGAA	1740
	TTCCGAGACA	TAGTTTGTAA	GGCCCTTGTC	AAGGCGGTGT	GGAGCTCGGA	GGCCTCAGCG	1800
20	TACCTGGATG	AGCTGGCTTT	GGCTTGGCT	TGGAACCGCG	TGGACATTTC	CCAGAGTGAA	1860
	CTCTTTCCGG	GGGACATCCA	ATGGCGGTCC	TTCATCTCG	AAGCTTCCCT	CATGGACGCC	1920
	CTGCTGAATG	ACCGGCTTGA	GTTCGTGCGC	TGCTCATTT	CCCACGGCCT	CAGCTTGGGC	1980
	CACCTCTCTG	CCCCGATGCG	CCTGGCCCTA	CTCTACAGCG	CGGCGCCCTC	CAACTCGCTC	2040
	ATCCGCAACC	TTTTGGACCA	GGCGTCCAC	AGCGCAGGCA	CCAAAGCCCC	AGCCCTAAAA	2100
25	GGGGGAGCTG	CGGAGCTCCG	GGCCCTGAC	GTGGGGCATG	TGCTGAGGAT	GCTGCTGGGG	2160
	AAGATGTGCG	CGCGGAGGTA	CCCTCCGGG	GGCGGCTGGG	ACCTCAACCC	AGGCCAGGGC	2220
	TTCCGGGAGA	GCATGTATCT	GCTCTCGGAC	AAGGCCAACC	CGCGGCTCTC	GCTGGATGCT	2280
	GGCTCTGGGC	AGGCGCCCTG	GAGCGACCTG	CTTCTTTGGG	CAGTGTGTCT	GAACAGGGCA	2340
	CAGATGGCCA	TGTACTTCTG	GGAGATGGGT	TCCAATGCAG	TTTCTCTCAG	TCTTGGGGCC	2400
30	TGTTTGTCTG	TCCGGGTGAT	GGCAGCCCTG	GAGCCTGACG	CTGAGGAGGC	AGCACGGAGG	2460
	AAAGACCTGG	CGTTCAAGTT	TGAGGGGATG	GGCGTTGACC	TCTTTGGCGA	GTCCTATCGC	2520
	AGCAGTGAGG	TGAGGGCTGC	CCGCTCTCTC	CTCCGTGCGT	GGCGGCTCTC	GCTGGATGCT	2580
	ACTTGGCTCC	AGCTGGCCAT	GCAAGCTGAC	GGCGGTGCGT	TCTTTGCCCA	GGATGGGGTA	2640
	CAGTCTCTGC	TGACACAGAA	GTGCTGGGGA	GATATGGCCA	GCACTACACC	CATCTGGGCC	2700
35	CTGGTTCTCG	CCCTCTTTTG	CCCTCCACTC	ATCTACACCC	GCCTCATCAC	CTTCAGGAAA	2760
	TCAGAAAGAG	AGCCCAACAG	GGAGGAGCTA	GAGTTTGACA	TGATATGTGT	CATTAAATGG	2820
	GAAGGGCCTG	TCCGGACCGG	GGACCCAGCC	GAGAAGAGCG	CGCTGGGGGT	CCCGGCCCCG	2880
	TCCGGGCCCTG	CGGGTGTCTG	CGGGGGCCCG	TGCGGGGGGC	GCCGGTGCCCT	ACGCGGCTGG	2940
40	TTCCACTCTT	GGGGCGGCCG	GGTGACCATC	TTCAATGGGA	AGCTGGTCAG	CTACCTGCTG	3000
	TTCCCTGCTG	TTTCTCTGCG	GGTGTGCTCT	GTGGATTTCC	AGCCGGCGCC	GGCCGGCTCC	3060
	CTGGAGCTGC	TGCTCTATTT	CTGGGCTTTC	ACGCTGCTGT	GGAGGAACT	GGCCAGGGGC	3120
	CTGAGCGAGG	GCGGGGGCAG	CCTCGGCAGC	GGGGGCCCCG	GGCTTGGCCA	TGCTCTACTG	3180
	AGCCAGCGCC	TCCGCTCTTA	CCTCGCGGAC	AGCTGGAAAC	AGTGGGACCT	AGTGGCTCTC	3240
45	ACCTGCTTCC	TCTTGGGCGT	GGGCTGCCCG	CTGACCCCGG	GTTTGTACCA	CCTGGGCGGC	3300
	ACTGTCTCTT	GCATGGACTT	CATGGTTTTC	ACGGTGGCGG	TGCTTCACAT	CTTCAGGCTC	3360
	AAACAAACAG	TGGGGGCCAA	GATCGTCATC	GTGAGCAAGA	TGATGAAGGA	CGTGTCTCTC	3420
	TTCTCTCTCT	TCTCTGGCGT	GTGGCTGGTA	GCCTATGGCG	TGGCCACGGA	GGGGCTCTCT	3480
	AGGCCACCGG	ACGCTGACTT	CCCAAGTATC	CTGCGCCGCG	TCTTCTACCG	TCTCTACTCT	3540
50	CAGATCTCTG	GGCAGATTCG	CCAGGAGGAC	ATGGACGCTG	CCCTCATGGA	GCACAGCAAC	3600
	TGCTCTGCTG	AGCCCGGCGT	CTGGGCACAC	CCTCTGGGGG	CCAGGCGGGG	CACTTGGGTC	3660
	TCCAGATATG	CCAACCTGGC	GSTGGTGCTG	CTCCTGTGTA	TCTTCTCTCT	CGTGGCCAAC	3720
	ATCCTGCTGG	TCAACTTGCT	CATTGCCATG	TTCACTTACA	CATTCCGCCA	AGTACAGGGC	3780
	AAACAGGATC	TCTACTGGAA	GGCGCAGCGT	TACCGGCTCA	TCCGGGAATT	CCACTCTCGG	3840
55	CCCGCGCTGG	CCCGGCCCTT	TATCCTCATC	TCCCACTTGC	GCCTCTGCTG	CAGGCAATTG	3900
	TGCAAGGAGC	CCAGCGGCTC	CCAGCGGCTC	TCCCGGCGCC	TGAGGCAATT	CGGGGTTTAC	3960
	CTTTCTAAGG	AAGCCGAGCG	GAGCTGCTTA	ACGTGGGAAT	CGGTGCATAA	GGAGAACTTT	4020
	CTGCTGGCAC	GCGCTAGGGA	CAAGCGGCGG	AGCGACTCCG	AGCGTCTGAA	GCGCACGTCC	4080
	CAGAAGGTGG	ACTTGGCACT	GAACAGCTG	GGACACATCC	GCGAGTACGA	ACAGCGGCTG	4140
60	AAAGTGTCTG	AGCGGAGGCT	CCAGCAGTGT	AGCCGCGCTC	TGGGGTGGGT	GGCCGAGGGC	4200
	CTGAGCCGCT	CTGCTTGTCT	GGCCCGGAGT	GGCGCGCCAC	CCCTGACCTT	GCCTGGGTCC	4260
	AAAGACTGAG	CCCTGCTGGC	GGACTTCAAG	GAGAAGCCCC	CACAGGGGAT	TTTGTCTCTA	4320
	GAGTAAGGCT	CATCTGGGCC	TGCGCCCGCG	CACCTGGTGG	CCTTGTCTCT	GAGGTGAGCC	4380
	CCATGTCCTT	CTGGGCACTT	GTCAAGGACA	CCTTGGGGAG	TGTATCTCTT	ACAAACCAAC	4440
65	GCATGCTCCG	CTCCTCCGAG	AACCAAGTCC	AGCCTGGGAG	GATCAAGGCC	TGGATCCCGG	4500
	GGCGTTATCC	ATCTGGAGGC	TGCAGGGTCC	TTGGGGTAAC	AGGGACCAAC	GACCCCTCAC	4560
	CATCTACAGA	TTCTTCACAC	TGGGGAATA	AAGCCATTTC	AGAGGAAAAA	AAAAAAAAAA	4620
	AAAAAAAAAA	AAAAAAAAAA	A				

Seq ID NO: 558 Protein sequence
Protein Accession #: XP_057188.1

70	1	11	21	31	41	51	
	1	11	21	31	41	51	
	MEDAFGAAYV	TVWDSAHHT	EKPTDAYGEL	DFTGAGRKHS	NFLRLSDRTD	PAAYVSLVTR	60
	TWGFRAFNLV	VSVLGGSGGF	VLQTLQDL	RRGLVRAAQ	TGAMIVTGG	HTGIGRHVGV	120
75	AVRDHQMST	GGTKVYAMGV	APWGVVRNRD	TLINPKGSFP	ARYRWGRDPE	DGVQFPLDYN	180
	YSAFVLVDDG	THGCLGGENR	FLRLLESYIS	QKKTGVGGTG	IDIPVLLILLI	DGDEKMLTRI	240
	ENATQAQLPC	LLVAGSGGAA	DCLAETLEDT	LAPGSGGARQ	GEARDRIIRP	FPKIDLEVLQ	300
	AQVERIMTRK	ELLTVYSSE	GSEFETIVL	KALVKACGSS	EASAYLDEL	LAVANNKVDI	360
80	AQSELPRGDI	QWRSPHLEAS	IMDALLNDRP	EFVRLLSHSG	LSLGHFLTPM	RLAQLYSAP	420
	SNLLRLMLD	QASESAGTKA	PALKGGAEL	RPPDVGVHLR	MLLGKMCAT	YPSGGWDPH	480
	PGQGFESMY	LLSDKATSP	SLDAGLGQAP	WSDILLWALL	LNRAQWANYF	WEMGSNAVSS	540
	ALGACILLRV	MARLEPDABE	AARRKDLAPK	FEGMGVDFLG	BCYRSSEVRA	ARLLLRCP	600
	WGDATCQLA	MQADARAFPA	QDGVQSLTQ	KWNGDMASTT	PIWALVLAPF	CPPLIYTRLI	660
	TFRKSEBEP	RELEFPDMS	VINGSGPVGT	ADPAERTPLG	VFRQSGRP	CGGRGGRRC	720

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LRRWFHFWGA  PVTIFMGNVV  SYLLFLLLP  RVLLVDFQPA  PPGSLKLLLY  FWAFTLLCEE  780
LRQGLSGGGG  SLA9GGPGPG  HASLSQRLRL  YLADSWNQCD  LVALTCFLLG  VGCRLTPGLY  840
HLGRTVLICID  FMVTVRLHL  IFTVNRQLGP  KIVTVSKMMK  DVFFFLFLLG  VWLVAYGVAT  900
BGLLRPRDS  FPSILRRVVF  RPYLQIFGQI  PQEDMDVALM  EHSNCSSEFG  FWAHPGAQA  960
GTCVSQYANW  LVVLLLVIFL  LVANILLVNL  LIAMFSYTFG  KVQGNSDLYW  KAQRYRLIRE  1020
FHSRPAALPP  FIVISHRLLL  LRQLCRRPRS  PQPSSPALES  FRVYLSKEAB  RKLLTWESVH  1080
KENFLARAR  DKRESDBERL  KRYSQKVDLA  LKQLGHIREY  BQRLKVLERE  VQCCSRVLGW  1140
VAEALRSAL  LPPGGPPPPD  LPGSKD

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Seq ID NO: 559 DNA sequence
Nucleic Acid Accession #: NM_006853.1
Coding sequence: 26..874

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|      |      |      |      |      |
AGGAATCTGC  GCTCGGGTTC  CGCAGATGCA  GAGGTTGAGG  TGGCTGCGGG  ACTGGAAGTC  60
ATCGGGCAGA  GGTCTTCACG  CAGCCAAGGA  ACCTGGGGCC  CGCTCCCTCC  CCTCCAGGC  120
CATGAGGATT  CTGCAGTTAA  TCTGCTGTGC  TCTGGCAACA  GGGCTGTAG  GGGGAGAGAC  180
CAGGATCATC  AAGGGGTTCG  AGTGCAAGCC  TCACTCCAG  CCTGGCAGG  CAGCCCTGTT  240
CAGGAAGACG  CGGCTACTCT  GTGGGGCGAC  GCTCATCGCC  CCCAGATGGC  TCCTGACAGC  300
AGCCCACTGC  CTCAGCCCC  GCTACATAGT  TCACCTGGGG  CAGCACAACC  TCCAGAAGGA  360
GGAGGGCTGT  GAGCAGACCC  GGACAGCCAC  TGAGTCCTTC  CCCCACCCCG  GCTTCAACAA  420
CAGCCCTCCC  AACAAAGACC  ACCGCAATGA  CATCATGCTG  GTGAAGATGG  CATCGCCAGT  480
CTCCATCACC  TGGGCTGTGC  GACCCCTCAC  CCTCTCCTCA  GCGTGTGTCA  CTGCTGGCAC  540
CAGCTGCCTC  ATTTCGGGCT  GGGGCGACAC  GTCCAGCCCC  CAGTTACGCC  TGCCTCACAC  600
CTTGCAGTGC  GCCAACATCA  CCATCATTGA  GCACCAGAAG  TGTGAGAAAG  CCTACCCCGG  660
CAACATCACA  GACACCATGG  TGTGTGCCAG  CGTGCAAGAA  GGGGGCAAGG  ACTCTGCCA  720
GGGTGACTCC  GGGGGCCCTC  TGGTCTGTAA  CCACTCTCTT  CAAGGCATTA  TCTCCTGGGG  780
CAGGATATCG  TGTGCGATCA  CCGAAAGCC  TGGTGTCTAC  ACGAAAGTCT  GCAATATGT  840
GGACTGGATC  CAGGAGACGA  TGAAGAACAA  TTAGACTGGA  CCCACCCACC  ACAGCCCATC  900
ACCTCCATT  TCCACTTGGT  GTTGTGTTCC  TGTTCACCT  GTTAATAAGA  AACCTTAAGC  960
CAAGACCTTC  TACGAACATT  CTTTGGGCT  CCTGCACTAC  AGGAGATGCT  GTCACTTAAT  1020
AATCAACCTG  GGGTTCGAAA  TCAGTCAGAC  CTGGATTCAA  ATTCGCTT  GAAATATTGT  1080
GACTCTGGGA  ATGACAACAC  CTGGTTTGT  CTCTGTGTA  TCCCAGCCC  CAAAGACAGC  1140
TCTTGCCAT  ATATCAAGGT  TTCAATAAAT  ATTTGCTAAA  TGAGTG

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Seq ID NO: 560 Protein sequence
Protein Accession #: NP_006844.1

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MRILQLILLA  LATGLVGGET  RIKGFCEKP  HQPFWQAALF  EKTRILLOGAT  LIAPRNLLTA  60
ARCLKPRYIV  HLGQHNLOKE  EGCEQTRTAT  ESFPFHPFNN  SLPNKDHEND  IMLVRMASPV  120
STWAVRPLT  LSSRCVTAGT  SCLISGWGST  SSPOLRLPHT  LRCANITIE  HQKCNAYPG  180
NITDTMVCAS  VQGGKDSQC  QDSGGPLVCN  QSLQGIISWG  QDPCAITRKP  SVYTKVCKYV  240
DNIQSTMKNN

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Seq ID NO: 561 DNA sequence
Nucleic Acid Accession #: AY046419.1
Coding sequence: 1..1743

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ATGTTTACCT  TCTCTGCATC  TGTCACTGCT  GCTGTCAGTG  GCTCTCTGGT  GGGTTATGAA  60
CTTGGGATCA  TCTCTGGGGC  TCTTCTTCAG  ATCAAAACCT  TATTAGCCCT  GAGCTGCCAT  120
GAGCAGGAAA  TGGTGTGTAG  CTCCTCTGTC  ATTGGAGCCC  TCTTGGCTTC  ACTCACGGGA  180
GGGGTCTCTG  TAGACAGATA  TGGAGAGAGS  ACAGCAATCA  TCTTGTCTAT  CTGCTGCTT  240
GGACTCGGAA  GCTTAGTCTT  GATCCTCACT  TTATCTTACA  CGGTCTTAT  AGTGGGACGC  300
ATTGCCATAG  GGGTTTCCAT  CTCCTCTCT  TCCATTGCCA  CTGTGTGTTA  CATCGCAGAG  360
ATTGCTCCTC  AACACAGAAG  AGGCTTCTT  GTGTCACTGA  ATGAGCTGAT  GATTGTCTATC  420
GGCATTTCTT  CTGCTTATAT  TTCAAATTAC  GCATTTGCCA  ATGTTTTCOA  TGGCTGGGAG  480
TACATGTTTG  GTCCTGTGAT  TCCCTTGGGA  GTTTTGCAAG  CAATTGCAAT  GTATTTTCTT  540
CCTCCAAGCC  CTCGGTTTCT  GGTGATGAAA  GGAAGAAGG  GAGCTGTAG  CAAGGTTCCT  600
GGAAGGTTAA  GAGCACTCTC  AGATACAACT  GAGGAATCA  CTGTGATCAA  ATCCTCCCTG  660
AAGATGAAT  ATCAGTACAG  TTTTGGGAT  CTGTTTCGTT  CAAAAGACAA  CATGCGGACC  720
GGAATATGA  TAGGACTAAC  ACTAGTATTT  TTTGTACAAA  TCACTGGCCA  ACCAAACATA  780
TTGTTCTATG  CATCAACTGT  TTGAAGTCA  GTTGGATTTT  AAAGCAATGA  GGCAGCTAGC  840
CTCGCTCCA  CTGGGGTTGG  AGTGTGCAAG  GTCAATGACA  CCATCCCTGC  CACTCTTCTT  900
GTAGACCATG  TCGGCAGCAA  AACATTCTTC  TGCAATGGCT  CCTCTGTGAT  GGCAGCTTGG  960
TTGGTGACCA  TGGGCATCGT  AAATCTCAAC  ATCCACATGA  ACTTCAACCA  TATCTGCGA  1020
AGCCACAAT  CATCAACCA  GTCTTGTGAT  GAGTCTGTGA  TTTATGGACC  AGGAAACCTG  1080
TCACCAACA  ACATACTCT  CAGAGACCAC  TTCAAGGGGA  TTTCTTCCA  TAGCAGAGC  1140
TCACCTATGC  CCTGTAGAAA  TGATGTGAT  AAGAGAGGG  AGACGACCTC  AGCATCCTTG  1200
CTAAATGCTG  GATTAAGCCA  CACTGAATAC  CAGATAGTCA  CAGACCCTGG  GGAGCTCCCA  1260
GCTTTTGTGA  AATGGCTGTC  CTTAGCCAGC  TTGCTTGTGT  ATGTTGCTGC  TTTTCAATT  1320
GCTCTAGGAC  CAATGCCCTG  GCTGTGCTC  AGCGAGATCT  TTCTGGTGG  GATCAGAGGA  1380
CGAGCCATGG  CTTTAATCTC  TAGCATGAAC  TGGGGCATCA  ATCTCCTCAT  CTCGTGACA  1440
TTTTGACTG  TAACIGATCT  TATTGGCCTG  CCATGGGTGT  GCTTTATATA  TACATCATG  1500
AGTCTAGCAT  CCTGTCTTTT  TGTGTATG  TTTATACCTG  AGACAAAGGG  ATGCTCTTTG  1560
GAACAAATAT  CAATGGAGCT  AGCAAAAGTG  AACTATGTGA  AAAACAACAT  TTGTTTATG  1620
AGTCATCAC  AAGGAAGATT  AGTCCAAAA  CAGCCTCAA  AAGAAAACC  CCAGGAGCAG  1680
CTCTTGGAGT  GTAACAAGCT  GTGTGGTAGG  GGCCAATCCA  GGCAGCTTTC  TCCAGAGACC  1740
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Seq ID NO: 562 Protein sequence
Protein Accession #: AAL02327.1

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5 1      11      21      31      41      51
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MFIFLSSVTA AVSGLLVGYE LGIISGALLQ IKTLALSCH EQSMVVSSLV IGALLASLTG 60
GVLLIDRYGRR TAILLSCLL GLGSLVLLS LSYTVLIVGR IAGVSISSL SIATCVYIAE 120
IAPHRRGLL VSLNELMIVI GLSAYISNY AFANVFHGWK YMFGLVIFLG VLQAIAMYFL 180
PPSPRFLVMK QGGAASKVL GLRLALSDIT BELTVIKSSL KDEYQVSFWD LFRSKDNMRT 240
10 RIMIGLTLVF FVQITQDPNI LPYASTVLKS VGFQSNBAAS LASTGVGVVK VLISTIPATLL 300
VDWVGSKTFL CIGSSVMAAS LVTMGIVNLN IHMNFTHICR SHNSINQSLD ESVIYGPQNL 360
STNNTLRDEH PKGISHSRSR SIMPLRNDVD KRGETTSASL LNAGLSHTEY QIVTDPGDVP 420
AFLKWLSLAS LLVYVAAFSI GLGPMPLVL SEIFEGGIRG RAMALTSMMN WGINLLISLT 480
FLTVDLIGL PWVCFTYTIM SLASLFFVVM FIPETKGC SL EQISMELAXV NYVRNNICFM 540
15 SHHQBELVPK QPQKRPQEQ LLECNKLCGR GQSRQLSPET

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Seq ID NO: 563 DNA sequence
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Coding sequence: 1..894

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25 GAGAGCTGCG AGGCGAGCCG CGCGGGCGCC GACCCCGCGG ACCAGAAGAA CCGCCTGATG 180
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30 GCCATCAAGT ACCACTTTTC TCAGCCCATC CGCTTGGGAA ACATTCCTTT TAATTTAACC 480
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35 AAGCTAATTT ATAGCCTGCC TGCTGATGTG GAACATGGTT ACAGCTGCTC CATCTTTTGC 780
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Seq ID NO: 564 Protein sequence
Protein Accession #: XP_059466.1

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45 LGIDEDIDTL ILKGIAQRCT AIKYHFSQPI RLNRNIPNLT KTIQDDEWHL LHLERITAGF 180
LGMVAVLIC GCIVATVSEF WEESLTQKVA GLFLMTGIF CTISLCTYAA SISYDLNRLP 240
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Seq ID NO: 565 DNA sequence
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 Protein Accession #: Eos sequence

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75 Seq ID NO: 568 Protein sequence
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60	AGTTCCAGGA ACTCCACAC TAAGGAATG TACCTTCTCA GATCTCTGG TTTGTCTTCA 2100
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	CCCAGTTACA CTATCAGAGG AGAACCGTTC TGAAGGAAA GTTGGTTTTC AGGCTTATA 2220
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	TGCAGCTCAG GTTGCCTATG TGCTTCAAGA TTGGTGGCTT TCATCTGGG CAACCAACA 2340
	AAGTATGCTA AATGTCACTG TAATGGAGG AGGAATGTA ACCGAGAAGC TAGATCTTAA 2400
65	CTGGTACTTA GGAATTTATT CAGGTTTAA CAGGTTTACC GTTCTTTTG GCATAGCAAG 2460
	ATCTCTATTG GTATTTCTAG TCTTGTATA CTCTTCACA ACTTTGCACA ACRAAATGTT 2520
	TGAGTCAATT TCGAAAGCTC CGGTATTATT CTTTGATAGA AATCCAAAG GAAGAAATTT 2580
	AAATCGTTTC TCGAAAGACA TTGGACACTT GGTGATTTG CTGCGCTGA CGTTTGTAGA 2640
70	TTTCATCCAG ACATGCTTAC AAGTGGTTG TGTGTTCTCT GTGGCTGTGG CGTGTATTC 2700
	TTGGATGCA ATACCTTGG TTCCCTTGG AATCATTTTC ATTCTTCTTC GCGATATTT 2760
	TTTGGAAAGC TCAAGAGATG TGAAGCGCT GGAATCTACA ACTCGGAGTC CAGTGTTTTC 2820
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	GTGTGAGGAA CTGTTTGTAG CACAACAGGA TTTACATTA GAGGCTTGGT TCTTGTTTT 2940
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	AGCACCTTGG GAATATCAGA AAGCCCAACC ACCAGCTTGG CCCCATGAAG GAGTGATAAT 3240
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	TTCCCTCATC TCAGCCCTTT TTAGATTGTC AGAACCGGAA GGTAAAAATT GGATTGATAA 3420
	GATCTGACA ACTGAATTTG GACTTCAGGA TTTAAGGAAG AAAATGTCAA TCATACCTCA 3480
	GGAACTGTT TTGTCTACTG GAACATGAG GAAAAACCTG GATCCCTTGA AGGAGCACAC 3540
	GGATGAGGAA CTGTGGAATG CCTTACAGA GGTACACTT AAGAARACA TTGAAGATCT 3600

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 CAAGATAATG GTTTTAGATT CAGGAAGACT GAAAGAAATG GATGACCCGT ATGTTTGTCT 3900
 GCAGAAATAA GAGAGCCTAT TTACAAGAT GGTGCAACAA CTGGGCAAGG CAGAAGCCGC 3960
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 GACGCACTG TGAATCCAAC CAAAATGTCA AGTCCGTTCC GAAGGCATTG TCCACTAGTT 4140
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Seq ID NO: 572 Protein sequence
 Protein Accession #: AAC27076.1

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1 11 21 31 41 51
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 ENYDPMDSVA LNTAYAYATV LTFCTILAI LHILYFYHVQ CAGMRLRVAM CHMIVRKALR 180
 LBNMANGKTT TGQIVNLLSN DVNKFQDVIV FLHFLWAGPL QAIATVALLW MEIGISCLAG 240
 MAVLILILEL QSCFGKLFSS LRSKTATFTD ARIETMNEVI TGIRIKMYA WEKSFNLIIT 300
 NLRKKKISKI LRSGCLRGMN LASFFSASKI IVFVTFTYV LLGSVITASR VFWAVTLYGA 360
 VRLTUTLPEP SAIERVSEAI VSIRRIQTFL LLDEISORNE QLPDGDGKQV HVQDFTAFWD 420
 KASETPTLQG LSFTVRPQEL LAVVGPVGAG KSELLSAVLG ELAPSHGLVS VHGRIAYVSO 480
 QPWVSGTILR SNILFGKRYE KERYEKVIA CALKKDLQLL EDGDLTVIGD RGTTLGGGQK 540
 ARVNLARNAV QDAIYLLDD PLGAVDAEVS RELFELCTIQ ILHEKITLV TEQLQYLKAA 600
 SQILLKDKGK MVQKGTTFEF LKSGIDFGSL LKKNESSEQ PPVPGTPTLR NRTFSESSVW 660
 SQSSSRPSLK DGALESQDTE NVPVTLSEEN RSBGKVGPOA YKNYFRAGAH WIVFIFLIL 720
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 ARSLVFFYVL VNSSQTLEHK MFESILKAPV LFFDRNPIGR ILNRFSKDIG HLDLLEPLTF 840
 LDFIQTLQV VGVVSVAVAV IPWIALPLVP LGIIFIFLRR YFLETSRDVK RLESTTRSPV 900
 FSHLSSSLQG LWTIRAYKAE ERQCELFDMH QDLHSEAWFL PLTTSSENAV RLDAICAMFV 960
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 KSLISALFR LSEPEKGIWI DKILTTEIGL HDLRKKMSII PQEFVLFTGT MRKMLDPFKE 1140
 HTDEELWNAL QSVQLKMTL DLPKMDTEL AEGSNFVSUG QRQLVCLARA ILRKNQILII 1200
 DEATANVDPK TDELQKKIR EKFAHCTVLT LAHRLNTIID SDKIMVLDSG RLKEYDEPYV 1260
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Seq ID NO: 573 DNA sequence
 Nucleic Acid Accession #: Eos sequence
 Coding sequence: 1..1365

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1 11 21 31 41 51
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 TTTGCCAAT CTTTGACCAT TCGACTTAT AGATGCGGCT ATCATGTGGT CATAGGAAGT 180
 AGAATCCTA AGTTTGCTTC TGAATTTTT OCTCATGTGG TAGATGTGAC TCATCATGAA 240
 GATGCTCTCA CAAAAACAAA TATAATATT GTTGCTATAC ACAGAGAACA TTATACCTCC 300
 CIGTGGGACC TGAGACATCT GCTTGIGGGT AAAATCCTGA TTGATGTGAG CAATAACATG 360
 AGGATAAAC AGTACCCAGA ATCCAACTGT GAATATTGG CTTCATTATT OCCAGATTCT 420
 TTGATTGTCA AAGGATTAA TGTGTCTCA GCTTGGGCAC TTCAGTTAGG ACCTAAGGAT 480
 GCCAGCCGCC AGGTTTATAT ATGCAGCAAC AATATTCAAG CGCGACAACA GGTATTGAA 540
 CTGCCCCC AGTGTGAATT CATTCCTATT GACTTGGGAT CCTTATCATC AGCCAGAGAG 600
 ATTGAAATAT TACCCCTAGG ACTCTTACT CTCTGGAGAG GGCTAGTGGT GGTAGCTATA 660
 AGCTTGGCCA CATTTTTTT CTTTATTCC TTTGTGAGAG ATGTGATTCA TCCATATGCT 720
 AGAAACCAAC AGAGTGACTT TTACAAATTT CCTATAGAGA TTGTGAATAA AACCTTACCT 780
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 CTCTGCTTAC CGATGAGAAG GTCAGAGAGA TATTGTGTT TCAACATGGC TTATCAGCAG 1020
 GTTCNTGCA ATATTGAAA CTTTGGGAAT GAGGAAGAAG TTGGAGAAT TGAATGTAT 1080
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 TCAGTGAGCA ATGCTTTAAA CTGGAGAGAA TTCAGTTTTA TTCAGTCTAC ACTTGGATAT 1200
 GTCCGCTCTG TCATAAGTAC TTCCATGTT TTAATTTATG GATGGAAACG AGCTTTTGAG 1260
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Seq ID NO: 574 Protein sequence
 Protein Accession #: Eos sequence

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1 11 21 31 41 51
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 RINQYFESMA SYLASLFPDS LIVKGFNVVS AWALQLGPKD ASRQVYICSN NIQARQQVIE 180
 LARQLNPIPI DLGGLSSARE IENLPLRLFT LWRGPVVVAI SLATFFFLYS FVRDVIHPYA 240
 RNQSDDFYKI PIEIVMKILP IVAITLLSLV YLAGLAAAY QLYYGTXYRR FPPNLEINLQ 300
 CRKQLGLLSF FFAMVHVAYS LCLPMRRSER YLFINMAYQQ VHANIENSWN EEEVWRIEM 360
 ISFGIMSLQL LSLAVTSIP SVSNALNWRE FSPFIQSTLGY VALLISTFHV LIYGNKRAFE 420
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Seq ID NO: 575 DNA sequence
Nucleic Acid Accession #: NM_001873.1
Coding sequence: 3..1721

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CCTGGGCTCC GCGGCCAGTA GTGCAGCCCG TGGAGCCGCG GCTTTGCCCG TCTCTCTGCT 120
GTGGCCCCAG TGGCCGGGCT GACACTCAT T CAGCCGGGGA AGGTGAGGCG AGTAGAGGCT 180
GGTGCGGAAC TTGCCGCCCC CAGCAGCGCC GCGCGGCTAA GCCCAGGGCC GGCAGACAAA 240
AAGAGGCGCG CCGCGTAGGA AGGCACGGCC GCGCGGCGCG GAGCGCAGCG ATGGCCGGGC 300
GAGGGGGCAG CGCGCTGCTG GCTCTGTGCG GGCCTCTGCG TGCCCTGCGG TGGCTCCTGG 360
GCGCCGAAGC CCGAGAGCCC GGGGCGCCCG CGCGGGGCAT GAGGCGGCGC CGCGGGCTGC 420
AGCAAGAGGA CGGCATCTCC TTCAGTACC ACCGCTACCC CGAGCTGCGC GAGCGGCTCG 480
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AGGCAGCGTC TCAGCCCTGGT GAACTCAAGG ACTGGTTTGT GGGTCGAGGC AATGCCCAGG 840
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AAGGTGGTCC AATATATCAT CTGTTGAAAA ATATGAAGHA AATTGTGGAT CAAAACACAA 960
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CTGCCAATCT CAGTACCGCG GACCTTGTGG CCAATTATCC ATATGATGAG ACGCGGAGTG 1080
GTAGTGTCTA CGATATACAG TCTCTCCGAG ATGACGCCAT TTTCCAAAGC TTGCCCGCGG 1140
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ATGATGACAG CAGCTTTGTA GATGGAACCA CCAACGGTGG TGCTTGTGAC AGCTTACCTG 1260
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CCCTCATTTG CTAACCTTAG CAGATACACC GAGGAGTTAA AGGATTTGTC CGAGACCTTC 1440
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CGCAAGAGGA TGGGTATTAC TGGGATGTC TTATACCTGG AAACATATAA CTTACAGCCT 1560
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AATGCTATTG AATAGGTTAA CAGATACAGC TCGGAGTTGT GAGCACTCTA CTGCAAGACT 2160
TAAATAGTTC AGTATAAATT GTCTGTTTTT TCTGTGCTG ACTAATATA AGCATGATCT 2220
TGTTAATGCA TTTTGTAGG GAAAGAAAGG TACATGTTTA CAAAGAGGTT TTAGGAAAG 2280
AATAAAATTT GACTTCTTGC TTGTACATAT AGGAGCAATA CTATTATATT ATGTAGTCCG 2340
TTAACCTAC TTAAAGATT AGGGTTTCT CTGTGTTGTA GAGTGGCCCA GAATTGCATT 2400
CTGAATGAAT AAGGTTAAA AAAAATCCC CAGTAAAAA AAA

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Seq ID NO: 576 Protein sequence
Protein Accession #: NP_001864.1

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EALVSVLQC TAISRIYTVG RSFEGRELLV IELSDNPGVE EPGEPFXYI GNMHGNEAVG 120
RELILFLAQY LCNEYQKQNE TIVNLHSTR IHIMPDLNPD GFEKAAEQPS ELKDNFVVRG 180
NAQGIDLNRY FFDLDRIVYV NEKEGGPNMH LLKMKKIVD QNTKLAPETK AVIRWIMDIP 240
FVLNANLEGG DLVANYPYDE TRSGSAHEYS SSPDDAIFQS LARAYSSFPN AMSDENRPPC 300
RKNDDBSFV DTTTNGGAWY SVPGGMQDFN YLSNCFEIT VELSCFKFPF EETLKYWED 360
NKNSLISYLE QIERGVKGFV RDLQGNPIAN ATISVGEIDH DVTSKDGIDY WRLLIPGNKY 420
LTASAPGYLA ITKGVVPPYS PAAGVDPELE SFSEKKEEEK EELMEWKKMM SETLNF

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Seq ID NO: 577 DNA sequence
Nucleic Acid Accession #: Eos sequence
Coding sequence: 1..933

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GACTGTCCCG ATGGCAGCGA TGAAGAGAAC TGCACAGCAA ACCCTCTGCT TTGCTCCACC 240
GCCCGCTACC ACTGCAAGAA CGGCTCTCTG ATTGACAAGA GCTTCACTCT CGATGGACAG 300
AATAACTGTC AAGACAACAG TGATGAGGAA AGCTGTGAAA GTTCTCAGA ACCCGGCACT 360
GGGCAAGGTT TTGTGACTTC AGAGAACCAA CTGTGTATT ACCCGAGCAT CACCTATGCC 420
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CCACCTCTCT ACTCGAGGC CTGTCTGGAC CAGAGGCGCT CGTGGTATGA CCTTCTCTCA 720
CCGCGCTACT CTCTGACAC GGAATCTCTG AACCAAGCCG ACCTGGCCCC CTACCGCTCC 780
CGGTCCGGGA GTGCCAACAG TGCCAGCTCC CAGGCAGCCA GCAGCTCTCT GAGCGTGGAA 840
GACACCGACC ACAGCCCGGG GCAGCTTGGC CCCCAGGAGG CACTGTCTGA GCCACGGAC 900

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TCTGAGCCCA GCCAGGGCAC TGAAGAAGTA TAA

Seq ID NO: 578 Protein sequence
 Protein Accession #: Bos sequence

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DCPDGSDDEEN	CTANPLLCST	ARYHCKNGLC	IDKSPICDGQ	NNQQDN8DEE	SCBSSQEPGS	120
GQVFTISEEN	LVVYPSITYA	IIGSSVIFVL	VVALLALVLE	HQRKRNMLMT	LPVHRLQHPV	180
LLSRVLVLDM	PHBCNVITYN	NNGIQYVASQ	AEQNASEVGS	PPSYSEALLD	QRPAMYDLFP	240
PPYSSDTESL	NQADLPYRS	RSGSANSASS	QAASSLLSVE	DTSHSPQPG	PQEGTAEPRD	300
SEPSQGTREV						

Seq ID NO: 579 DNA sequence
 Nucleic Acid Accession #: AF179274.1
 Coding sequence: 1..1125

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TGGCTGCTGC	TGCTGCCCGT	CATGCTACTC	ATCGTAGCCC	GCCCGGTGAA	GCTCGCTGCT	120
TTCCCTACCT	CCTTAAGTGA	CTGCCAAGCG	COCACCGGCT	GGAATTGCTC	TGGTTATGAT	180
GACAGAGAAA	ATGATCTCTT	CCTCTGTGAC	ACCACACCTT	GTAAATTGTA	TGGGGAAATGT	240
TTAAGAATTG	GAGACACTGT	GACTTGGGTC	TGTCAGTTCA	AGTSCAACAA	TGACTATGTG	300
CCTGTGTGTG	GCTCCATGGG	GGAGAGCTAC	CAGAATGAGT	GTTACCTGGG	ACAGGCTGCA	360
TGCAAAACAG	AGAGTGGAGT	ACTTGTGGTG	TCAGAAGGAT	CATGTGCCAC	AGATGCAGGA	420
TCAGGATCTG	GAGATGGAGT	CCATGAAGGC	TCGGGAGAAA	CTAGTCAAAA	GGAGACATCC	480
ACCTGTGATA	TTTGCCAGTT	TGGTGCAGAA	TGTGACBAAG	ATGCCGAGGA	TGTCTGGTGT	540
GTGTGTAATA	TTGACTGTTC	TCAAACCAAC	TTCAATCCCC	TCTGCGCTTC	TGATGGGAAA	600
TCTTATGATA	ATGCATGCCA	AATCAAAGAA	GCATCGTGTC	AGAAACAGGA	GAAATTTGAA	660
GTCTGTCTTT	TGGGTGATG	TCAGATAAAC	ACAACTACAA	CTACTAAGTC	TGAAGATGGG	720
CATTATGCAA	GAACAGATTA	TGCAGAGAAT	GCTAACAAAT	TAGAAGAAAG	TGCCAGAGAA	780
CACCAATATC	CTTGTCCGGA	ACATTACAAAT	GGCTTCTGCA	TGCATGGGAA	GTGTGAGCAT	840
TCTATCAATA	TGCAGGAGCC	ATCTTGCAGG	TGTGATGCTG	GTATATCTGG	ACAACACTGT	900
GAAGAAAGAG	ACTACAGTGT	TCTATACGTT	GTTCGCCGTC	CTGTACGATT	TCAGTATGTC	960
TTAATGCGAG	CTGTGATTGG	AACAATTGAG	ATTGCTGTGA	TCGTGTGGGT	GGTCCCTGTC	1020
ATCACAAGGA	AATGCCCCAG	AAGCAACAGA	ATTACAGAGC	ACAAGCAAAA	TACAGGGCAC	1080
TACAGTTTCA	ACAATACAAAC	AAGAGGCTCC	ACGAGGTTAA	TCTGA		

Seq ID NO: 580 Protein sequence
 Protein Accession #: NP_057276.2

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DRENDLFLCD	TNTCKFDGEC	LRIGDTVTVC	QPKCNNDYV	PVCGSNGESY	QNECYLRQAA	120
CKQQSILIVV	SEGSCATDAG	SGSGDGVHEG	SGETSQKETS	TCDICQPGAE	CDEDAEDVWC	180
VCMIDCSQTN	FNELCASDGS	SYDNACQIKE	ASQKQKEIE	VMSLGRQDN	TTTTTKSEDG	240
HYATDYAEN	ANKLEBSARE	HHIFCPEHYN	GFCMHGKCEH	SINMQEPSCR	CDAGYTGQHC	300
EKKQYSVLIV	VPGPVRPQYV	LIAAVIGTIQ	IAVICVVVLC	ITRKCPRENR	IHRQKQNTGH	360
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Seq ID NO: 581 DNA sequence
 Nucleic Acid Accession #: S78203.1
 Coding sequence: 1..2190

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GAGGTACCAC	CTGCAACACC	TAGCCCTCCA	AAGAAGCCAT	CTCCGACAAT	CIGTGGCTCC	120
AACATACCAC	TGAGCATTTG	CTTCATTGTC	GTGAATGAAT	TCTGCGAGCG	CTTTTCTTAT	180
TATGGAATGA	AAGCTGTGCT	GATCCTGTAT	TTCTCTGATT	TCTGTGCACT	GATATGAAGAT	240
ACCTCCACAT	CTATATACCA	TGCCCTCAGC	AGCCTCTGTT	ATTTTACTCC	CATCCTGGGA	300
GCAGCCATTG	CTGACTCGTG	GTGGGAAAAA	TTCAAGACAA	TCATCTATCT	CTCCTTGGTG	360
TATGTGCTTG	GCCATGTGAT	CAAGTCCCTG	GGTGCCCTTAC	CAATACTGGG	AGGACAAGTG	420
GTACACACAG	TCCATTCATT	GATCGGCTTG	AGTCTAATAG	CTTTGGGGAC	AGGAGGCATC	480
AAACCCGTGT	TGGCAGCTTT	TGGTGGAGAC	CAGTTTGAGG	AAAAACATGC	AGAGGAACCG	540
ACTAGATACT	TCTCAGTCTT	CTACCTGTCC	ATCAATGCAG	GGAGCTTGAT	TTCTACATTT	600
ATCACACCCA	TGCTGAGAGG	AGATGTGCAA	TGTTTGGAG	AAGACTGCTA	TGCATTGGCT	660
TTTGGAGTTC	CAGGACTGCT	CATGGTAATT	GCACCTGTTG	TGTTTGCAAT	GGGAAGCAAA	720
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TTTGTCTATT	CCAATCGTTT	CAAGAACCGT	TCTGGAGACA	TTCCAAAGCG	ACAGCACTGG	840
CTAGACTGGG	CAGCTGAGAA	ATATCCAAAG	CAGCTCATT	TGGATGTAAA	GGCACTGACC	900
AGGGTACTAT	TCTTTTATAT	CCCATTTGCC	ATGTTCTGGG	CTCTTTTGGA	TCAGCAGGGT	960
TCAAGATGGA	CTTTCGAGGC	CATCAGGATG	AAATAGGAAT	TGGGGTTTTT	TGTGCTTCAG	1020
CCGAGCCAGA	TGCAGGTTCT	AAATCCCTTT	CTGGTTCTTA	TCTTCATCCC	GTGTTTGAC	1080
TTTGTCTATT	ATCATCTGGT	CTCCAGTGTG	GGAATTAAT	TCTCATCACT	TAGGAAAAATG	1140
GCTGTGTGTA	TGATCCTAGC	GTGCTTGGCA	TTTGCACTTG	CGGCAGCTGT	AGAGATAAAA	1200
ATAAATGAAA	TGGCCCCAGC	CCAGTCAGGT	CCCCAGGAGG	TTTTCTTACA	AGTCTTGAAT	1260
CTGSCAGATG	ATAGAGGTGAA	GGTGACAGTG	GTGGGAAATG	AAAACAAATC	TCTGTGTGATA	1320
GAGTCCATCA	AACTCTTTCA	GAAAAACCCA	CACATTTCCA	AACCTGCACCT	GAAAAACAAA	1380
AGCCAGGATT	TTCATCTCCA	CCTGAAATAT	CACATTTGTG	CTCTCTACAC	TGAGCATTCT	1440
GTGCGAGAGA	AGAATCTGTA	CAGTCTTGTG	ATTCGTGAAG	ATGGGAACAG	TATCTCCAGC	1500

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 AACACTTTGC ATAAAGATGT CAACATCTCC CTGAGTACAG ATACCTCTCT CAATGTTGGT 1620
 GAAGACTATG GTGTGTCTGC TTATAGAACT GTGCAAGAGG GAGAAATACC TGCACTGCAC 1680
 TGTAGAACAG AAGATAGAAA CTTTTCTCTG AATTGGGTC TTCTAGACTT TGGTGCAGCA 1740
 TATCTGTTTG TTATTACTAA TAACACCAAT CAGGCTCTTC AGGCTTGGA GATTGAAGAC 1800
 ATTCAGCCA ACAAAATGTC CATTGCGTGG CAGCTACCAC AATATGCCCT GGTACAGCT 1860
 GGGGAGGTCA TGTCTCTGT CACAGGTCTT GAGTTTCTT ATTCTCAGGC TCCCTCTAGC 1920
 ATGAAATCTG TGTCTCAGGC AGCTTGGCTA TTGACAATTG CAGTTGGGAA TATCATCTG 1980
 CTGTTGTGG CACAGTTCAG TGGCTTGGTA CAGTGGGCG AATTCAATTT GTTTCTCTGC 2040
 CTCCTGCTGG TGATCTGCTT GATCTCTCTC ATCATGGGCT ACTACTATGT TCCTGTAAAG 2100
 ACAGAGGATA TGCCGGGTCC AGCAGATAAG CACATTCCTC ACATCCAGGG GAACATGATC 2160
 AACTAGAGA CCAAGAGAC AAAACTCTGA

Seq ID NO: 582 Protein sequence
 Protein Accession #: AAB34388.1

1 11 21 31 41 51
 MNPFQENESK ETLFSPVSIE EVFPPRPPSP KKP6PTICGS NYFLSIAFIV VNRFCERFSY 60
 YGMKAVLLLY FLYFLHMNED TSTSIYHAFS SLCTFTPILG AALADSWLKG FKTIYLSLV 120
 YVLGEVIRSL GALPILGGQV VHTVLSLIGL SLIALGTGGI KPCVAAFQGD QFEEKHAEER 180
 TRYFVFFYLS INAGSLISTF ITPMLRGDVQ CPGEDCYALA FGVPGLLMVI ALVVFMAGSK 240
 IYNKPPPPGN IVAQVFKCIW FAISNRPKNR SGDIPKQHW LWRAAEKYPK QLMQVKAIT 300
 RVLFYIPLP MFVALLDQGG SRWTLQALRM NRNLGFFVLQ PDQMQLNPP LVLIFIFLFD 360
 FVIYRLVSKC GINFSRLRM AVGMILACLA FAVAAAEIK INEMABAQSG PQEVLQVLN 420
 LADDEVKTV VNNENSLI ESIKSPQKTP HYSKMLKTK SQDFHPLKY HNLSTYSHS 480
 VQKNWYSLV IRENGSIVS MMVKDTBSKT TNGMTTVRFV NTLHKDVNIS LSTDTSLNV 540
 KDYGVSAYRT VORGEYPAVH CRTEDKNFSL NLGLLDPGAA YLFVITNNTN QGLQANKIED 600
 IPANRMSLAW QLPQYALVTA GEVMPFVTLG EFSYSQAPSS MKSVLQAALW LTIAGNIIIV 660
 LVVAQFSGLV QWAEFILFSC LLLVICLIYS IMGYVVPVK TEDMRGFADK HIPHIQGNMI 720
 KLETRKTKL

Seq ID NO: 583 DNA sequence
 Nucleic Acid Accession #: NM_032642.1
 Coding sequence: 184..1263

1 11 21 31 41 51
 GACCATAGC AGGCACCCAG GCGTGTCTT GGCTCGGAAA CGGTGGCCCC CAATGTAGCC 60
 TAGTTTGAAC CTAGGAACCTG CAGGACCABA GAGATTCCAC TGAGAGCTGA TGGACGGGTG 120
 ACAGAGGGAA CCTACTCTG GAAACTGTCA GTCCAGGGC ACTGGGGAGG GCTGAGGCCG 180
 ACCATGCCCA GCGTGTCTG GCTGTTCACG GCTGTCTGTC TGTCCAGCTG GCGTCACTT 240
 CTGACAGAGC CCAACTCTG GTGGTCACTA GCTTTBAACC CGGTGCAGAG ACCCGAGATG 300
 TTTATCATCG GTGCCCCGCC CGTGTGCAGT CAGCTTCCCG GCGTCTCCCC TGGCCAGAGG 360
 AAGCTGTGCC AATTGTACCA GGAGCACATG GCCTACATAG GGGAGGGAGC CAAGACTGGC 420
 ATCAAGGAAT GCCAGCACCA GTTCCGGCAG CGCCGGTGGG ATTGCAGCAC AGCGGACAA 480
 GCATCTGTCT TTGGGAGAGT CATGCAGATA GGCAGCCGAG AGACCGCCTT CACCCACGG 540
 GTGAGCGCGC CGCGGGTGGT CACGCCATC AGCCGGGCGT GCGCGGAGGG CGAGCTCTCC 600
 ACGTCCGCTG GTGCCCCGCC GCGCGGCCCG AAGGACCTGC CCGCGGACTG GCTGTGGGAC 660
 GCGTGTGGGG ACAACGTGGA GTACGGCTAC CGCTTCGCCA AGGAGTTTGT GGATGCCCG 720
 GAGCGAGAGA AGAACTTGG CAAAGGATCA GAGGAGCAGG GCGCGGTGCT CATGAACCTG 780
 CAAACAAACG AGGCGCGTGC CAGGGCTGTG TATAAGATGG CAGAAGTAGC CTGCAATGC 840
 CAOGGCGTCT CGGGGTCTG CAGCCTCAAG ACCTGCTGGC TGCAGCTGGC CGAGTTCCGC 900
 AAGGTCCGGG ACCGCTGGA GGAGAAATAC GACAGGCGCG CGCCCATGCG CGTCAACCGC 960
 AAGGGCCGGC TCGAGCTGGT CAACAGCCGC TTCAACGAGC CCACCCCGGA GGACTGTGTC 1020
 TATGTGGACG CAGGCCCGA CTACTGCCCG CGCAACGAGA GCACGGCTC CCGGGCACG 1080
 CAGGGCCGCC TCTGCAACA GRACCTCGAG GGCATGGATG GCTGTGAGCT CATGTGCTG 1140
 GGGCTGTGCT ACAACCTGTT CAGAGCGGTG CAGGTGGAGC GCTGCCACTG CAAGTTCCAC 1200
 TGGTCTGCT TCGTCAAGTT TAAGAABTGC ACGGAGATCG TGAACCASTA CATCTGAAA 1260
 TAGCCCGGAG GGCCTGTCTC CGGCCCGCCC TGCACTCTGC CTCACAAAGG TCATATATAT 1320
 ATAAATCTAT ATAAATCTAT TTTATATTG TATAAGTAAA TGGGTGGGTG CTATACAAAT 1380
 GAAAGATGAA AATGGAAGG AAGAGCTTAT TTAAGAGACG CTGGAGATCT CTGAGGATG 1440
 GACTTGTCTG GTTCTCTCTT CTGTGTGGGT GGGAGACAGG GCTTTTTCTC TCCCTCTGGC 1500
 GAGGACTCTC AGGATGTAGG GACTTGGAAA TATTACTGT CTGTCCACCA CGGCTGTGAG 1560
 GAGGAGGTT GTGTGTGAT GGAGGAGATG ATCTGTCTG GAAGTCTAGA GTCTTTGTG 1620
 GTTAGAGGAC TGCTGTGAT CCGGCCACT AGGCCAAGAG GCGCTATGAA GGTGGCGGAG 1680
 ACTCAGCTTC AACCTCGATG TCTTCAGGGT CTGTCCAGAG ATGTAGATGG GTTCCGTAG 1740
 AGGCTCGGTG CTCTCTTACT CTTCATCCA CGTGCATCTG TGGCGCATCT GCAGTTTACA 1800
 GGAACGGCTC CTTCCTTAAA ATGAGAAGTC CAAGGTCTAT TCTGGCCAGG TGACCAAGA 1860
 GAGATCTGCA CCTCCCGGAC TTCAGGCTTG CCTTCCAGC GAGAAATCTT CATCTCCAC 1920
 GGTCTACTAG CTCTTACTG AAGAGGAAG GGGGCCATTG GACCTGACAT GTCAAGAAAG 1980
 CCTAAACTG AATGTTTGGC CCGGGCTGCG AGAAGCCAGG GTGCATGACC AGGCTGCGTG 2040
 GACGTTATAC TGTCTTCCCC CACCCCGGGG GAGGGGAAGC TTGAGCTGCT GCTGTCACTC 2100
 CTCACCGGAG TGAGGCGCTCA CAAACACAG GAOGCTGCAA CGGCTCAGCG TGGCGGGCCC 2160
 GGCCTGCTCA TCATCTCTGC CCCAGGTGTA CGGTTTCTCT CTGACATTAA ATGCCCTTCA 2220
 TGGAAAAAAA AAAAAGAAAA AAAAAAAAAA AA

Seq ID NO: 584 Protein sequence
 Protein Accession #: NP_116031.1

1 11 21 31 41 51
 MPBLLLLFTA ALLSSWAQLL TDANSWWSLA LNPVQRPEMF IIGAQPVCSSQ LFLGLSPGQRK 60
 LQQLYQEHMA YIGGAKTGI KBCQHQFBR RNNCSTADNA SVFGRVMIG SRETAFTHAV 120

SAAGVVNAIS RACREBELST CGCSRTARFK DLPRDWLWGG CGDNVEYGYR FAKSFVDARE 180
 REKNFAKGSB EQGRVLMNLQ MNEAGRRAVY KMADVACKCH GVSQSCSLKT CWLQAEFRK 240
 VGDRLKEKYD SAAAMRVTRK GRLELVNSRF TQPTPEDLVY VDPSPDYCLR NESTGSLGTQ 300
 GRLCNKTSQEG MDGCELMCCG RGYNQFKSVQ VERCHCKCFHW CCFVRCKKCT EIVDQYICK

Seq ID NO: 585 DNA sequence
 Nucleic Acid Accession #: Bos sequence
 Coding sequence: 1..1479

1 11 21 31 41 51
 | | | | |
 ATGGCTTTGA ACTCAGGGTC ACCACCAGCT ATTGGACCTT ACTATGAAAA CCATGGATAC 60
 CAACCGGAAA ACCCTTATCC CACACAGCCC ACTGTGTCTC CCACTGTCTA CGAGGTGCAT 120
 CCGGCTCAGT ACTACTCGTC CCCCGTGGCC CAGTAAGCCC CGAGGGTCCT GACGCAGGCT 180
 TCCAAACCCG TGGTCTGCAC CGAGCCCAAA TCCCATCCG GACAGGTGTG CACCTCAAAG 240
 ACTAAGAAAG CACTGTGCAT CACCTTGACC CTGGGGACCT TCCTCGTGGG AGCTCGCGTG 300
 GCGCTGGGCC TACTCTGGAA GTTCATGGGC AGCAAGTGCT CCAACTCTGG GATAGAGTGC 360
 GACTCTCTAG GTACTTGCAT CAACCCCTCT AACTGTGTGT ATGGCGTGTG ACACCTGCCC 420
 GCGGGGAGG ACAGGAATCG GTGTGTTCGC CTCTACGGAC CAACCTTCAT CCTTCAGGTG 480
 TACTCATCTC AGAGGAATGC CTGGCAACCT GTGTGCCAAG ACGACTGGNA CGAGAATAC 540
 GGGCGGGCGG CCTGCAGGA CATGGGCTAT AAGAATATT TTTACTCTAG CCAAGGAATA 600
 GTGGATGACA GCGGATCCAC CAGCTTTATG AAACCTGAACA CAAGTGCCGG CAATGTGCAT 660
 ATCTATAAAA AACTGTACCA CAGTGATGCC TGTCTTCAA AAGCAGTGGT TCTTTACGC 720
 TGTATAGCTC CGGGGCTCAA CTGAACTCA AGCCGCCAGA GCAGGATCGT GGGCGGCGAG 780
 AGCGGCTCTC CGGGGCGCTG GCCCTGGCAG CTCAGCTGCG ACGTCCAGAA CGTCCACGTG 840
 TCGGAGGCT CATCATCAC CCGCGAGTGG ATCGTACAG CCGCCCACTG CGTGGAAAAA 900
 CCTCTTAACA ATCCATGGCA TTGGACGGCA TTTGCGGGGA TTTTGAGACA ATCTTTCATG 960
 TTCTATGGAG CCGGATACCA AGTAGAAAAA GTGATTCTC ATCCAAATTA TGACTCCAAG 1020
 ACCAAGAAC AATGACATTG CTTGATGAAG CTGCAGAAC CTCTGACTTT CAACGACCTA 1080
 GTGAAACAG TGTGTCTGCC CAACCCAGGC ATGATGCTGC AGCCAGAAC GCTCTGCTGG 1140
 ATTTCCGGT GGGGGGCCAC CGAGGAGAAA GGAAGACCT CAGAAGTCT GAACGCTGCC 1200
 AAGGTGCTTC TCATTGAGAC ACAGAGATGC AACAGCAGAT ATGTCTATGA CAACCTGATC 1260
 ACACCAGCCA TGATCTGTGC CGGCTTCTTG CAGGGGAACG TCGATTCTTG CCAGGGTGAC 1320
 AGTGGAGGGC CTCTGTCTAC TTCGAAGAAC AATATCTGGT GGCTGATAGG GGATACAAGC 1380
 TGGGATTCTG GCTGTGCCAA AGCTTACAGA CCAGGAGTGT ACGGGAATGT GATGGTATT 1440
 ACGGACFGA TTTATGACA AATGAGGCA GACGGCTAA

Seq ID NO: 586 Protein sequence
 Protein Accession #: Bos sequence

1 11 21 31 41 51
 | | | | |
 MALNSGSPPA IGPYYENEGY QPENFYPAQP TVVPTVYEVH PAQYYPSPVE QYAPRVLTQA 60
 SNFVVCQPK SPSTCTCTSK TKKLCITLT LGTFVLGAAL AAGLLMKFMG SKCNSGIEC 120
 DSSGTCNPB NWCDSYSECP GGEDENRCVR LYGNFPIQV YSQKSKMHP VCQDDWNNY 180
 GRAACRDMGY KNNFYSSQGI VDSGSTSEFM KLNTSAGNVD IYKLYHSDA CSSKAVVSLR 240
 CIACGVNLNS SRQSRIVGGE SALPGANFWQ VSLHVNVRHV CGSSIITPEM IYTAACVVK 300
 PLNNFWHTA FGIILRQSGF FYGAGYQVEK VISHPNYDSK TKNNDIALMK LQKPLTFNDL 360
 VKFVCLNPG MMLQPPQLCW ISGWGATEEK GKTSEVLNAA KULLIETQRC NSRYVYDMLI 420
 TPAMICAGFL QGVNDSQGD SGGPLVTSKN NIWWLIGDTS WSGGCAKAYR PGVYGVNVNF 480
 TDWLYRQMEA DG

Seq ID NO: 587 DNA sequence
 Nucleic Acid Accession #: NM_005656.1
 Coding sequence: 57..1535

1 11 21 31 41 51
 | | | | |
 GTCATATTGA ACATTCCAGA TACCTATCAT TACTOGATGC TGTGATAAC AGCAAGATGG 60
 CTTTGAATCK AGGGTCAACA CCAGCTATTG GACCTTACTA TGAAGACCAT GGATACCAAC 120
 CGGAAACCC CTATCCCGCA CAGCCCTACG TGGTCCCAC TGCTACGAG GTGCATCCGG 180
 CTCAGTACTA CCGGTCCCCC GTGCCCCAGT ACGCCCGAG GGTCTGAGC CAGGCTTCCA 240
 ACCCGTGGT CTGCACGCA CCCAAATCCC CATCCGGAG AGTGTGCACC TCRAAGACTA 300
 AGAAGACACT GTGCATCACC TTGACCTGG GACCTTCCCT CGTGGGAGCT GCGCTGGCCG 360
 CTGGCTTACT CTGGAAGTTC ATGGGCAGCA AGTGTCTCAA CTCTGGGATA GAGTGCAGT 420
 CCTCAGGTAC CTGCATCAAC CCTCTTAAC GTGTGTATGG CGTGTACAC TGCCCGCGCG 480
 GGGAGGACGA GAATCGGTGT GTTCGCTCT ACGGACCAA CTTCATCTTT CAGATGTACT 540
 CATCTCAGAG GAAGTCTCTG CACCTGTGT GCCAAGACGA CTGGAACGAG AACTACGGGC 600
 GGGCGGCTG CAGGGACATG GGTATAGA ATAATTTT TA CTACGCCAA GGAATAGTGG 660
 ATGACAGCGG ATCCACAGC TTATGAAAC TGAACACAAG TGCCGCCAAT GTGATATCT 720
 ATAAAAACT GTACCAAGT GATGCTGTCT CTCAAAAGC AGTGTCTTCT TTACGCTGTT 780
 TAGCTTGGG GGTCAACTTG AACTCAGCC GCCAGAGCAG GATCGTGGGC GGTGAGAGCG 840
 CGCTCCCGG GGCCTGGCCC TGGCAGTCA GCCTGCACGT CCAGAACGTC CACGTGTGCG 900
 GAGGCTCAT GAGTCCGCC GAGTGGATCG TGACAGCGCG CCACTGCTG GAAAAACCTC 960
 TTAACAATCC ATGGCATTGG ACGGCATTG CGGGGATTTT GAGACAATCT TTCATGTTCT 1020
 ATGGAGCCGG ATACCAAGTA TTTCTCATCC AAATTATGAC TCCAAGACCA 1080
 AGAACAATGA CATTCGCTG ATGAAGCTGC AGAAGCCTCT GACTTTCAC GACCTAGTGA 1140
 AACCAGTGT TCTGCCCAAC CCAGGCATGA TGCTGCAGCC AGAACAGCTC TGCTGGATTT 1200
 CCGGGTGGG GGCACCGAG GAGAAAGGGA AGACCTCAGA AGTGTGAAAC GCTGCCAAGG 1260
 TGCTTCTCAT TGAGACAGAG AGATGCAACA GCAGATATGT CTATGACAC CTGATCACAG 1320
 CAGCCATGAT CTGTGCCGGC TTCTGCAAG GGAACGTCGA TTTCTTCCAG GGTGACAGT 1380
 GAGGGCTCT GGTCACTTG AACACAATA TCTGGTGGCT GATAGGGGAT ACAAGCTGG 1440
 GTTCTGGCTG TGCCAAAGCT TACAGACCG GAGTGTACGG GATGTGTGAT GTATTACAG 1500
 ACTGGATTTA TCGACAAATG AAGGCAACCG GCTAATCCAC ATGGTCTTCT TCCTTGACGT 1560

5 CGTTTTACAA GAAACAATG GGGCTGGTTF TGCTTCCCGG TGCATGATTT ACTCTTAGAG 1620
 ATGATTACAGA GGTCACTTCA TTTTATTAA ACAGTGAAC TGTCTGGCTT TGGCACTCTC 1680
 TGCCATACTG TGCAGGCTGC AGTGGCTCCC CTGCCAGGCC TGCTCTCCCT AACCCCTTGT 1740
 CCGCAGGGGG TGATGGCCGG CTGGTTGTBQ GCACTGGCGG TCAATTGTGG AAGGAAGAGG 1800
 GTTGGAGGCT GCOCCCATTT AGATCTTCCT GCTGAGTCCT TTCCAGGGGC CAATTTTGA 1860
 TGAGCATGGA GCTGTCACTT CTCAGCTGCT GATGACTTGG AGATGAAAAA GGAGAGACAT 1920
 GGAAGGGGAG ACAGCCAGGT GGCACCTGCA GCGGCTGCCC TCTGGGGCCA CTTGGTAGTG 1980
 TCCCAGCCTT ACTTCACAAG GGGATTTTGC TGATGGGTTT TTAGAGCCCT AGCAGCCCTG 2040
 GATGGTGGCC AGAATAAAG GGACCGGCC TTCTGGGTG GTGACGTGGT AGTCACTTGT 2100
 10 AAGGGGAACA GAAACATTTT TGTCTTATG GGGTGAGAAT ATAGACAGTG CCGTTGGTGC 2160
 GAGGGAAGCA ATTGAAAAGG AACTTGCCTT GAGCACTCCT GGTGCAAGTC TCCACCTGCA 2220
 CATTGGGTGG GGTCTCTGGG AGGGAGACTC AGCCTTCTCT CTCATCTCTC CTGACCTTGC 2280
 TCTTAGCACC CTGGAGAGTG AATGCCCTTT GGTCCCTGGC AGGGGCGCAA GTTTGGCACC 2340
 15 ATGTCGGCCT CTTCAGGCTT GATAGTCATT GGAATTTGAG GTCCATGGGG GAAATCRAGG 2400
 ATGCTCAGTT TAAGGTACAC TGTTCCTATG TTATGTTTCT ACACATTGAT GGTGGTGACC 2460
 CTGAGTTCAA AGCCATCTT

Seq ID NO: 588 Protein sequence
 Protein Accession #: NP_005647.1

20 1 11 21 31 41 51
 MALNQSPPA LQPYENHGY QPENPYPAQF TVVPTVYEVH PAQYYPSPVF QVAPRVLTQA 60
 25 SNPVVCTQPK SPSTGVCTSK TKKALCITLT LGTFLVGAAL AAGLLWKFMG SKCSNSGIEC 120
 DSSGTCINFS NWCDDVSHCF GGEDENRCVR LYGPNFILQM YSSQRKSWHP VQDDWNENY 180
 GRAACRDMGY KNNFYSSQGI VDDSGSTBFM KLNTSAGNVD IYKLYHSDA CSKAVVSLR 240
 CLACGVNLNS SRQSRIVGGE SALPGAMPWQ VSLHVQNVHV CGGSLITPEW IVTAHRCVEK 300
 PLNFWPHWTA FAGILRQSPM FYGAGYQVQK VISHENYDSK TKNNIDIALMK LQKPLTFNDL 360
 VKFVCLPNEF MDLQPEQLCW ISGKGATEEK GKTSEVLNAA KVLILIFORC NSRYVYDNL 420
 30 TPAMICAGEL QGNVDSQGD SGGPLVTENN NIWWLIGDTS WSGSCAKAYR PGVYGNVMVF 480
 TDNIYRQMA NG

Seq ID NO: 589 DNA sequence
 Nucleic Acid Accession #: NM_001935.1
 Coding sequence: 1..2301

35 1 11 21 31 41 51
 40 ATGAAGACAC CGTGAAGAT TCTTCTGGGA CTGCTGGGTG CTGCTGCGCT TGTCCACATC 60
 ATCACCGTGC CCGTGCTTCT GCTGAACAAA GGCACAGATG ATGCTACAGC TGACAGTCGC 120
 AAAACTTACA CTCTAACTGA TTACTTAAAA AATACCTATA GACTGAAGTT ATACTCCCTA 180
 AGATGGATTT CAGATCATGA ATATCTCTAC AAACAAGAAA ATAATATCTT GGTATTCBAT 240
 GCTGAATATG GAAACAGCTC AGTTTCTCTG GAGAACAGTA CATTGTATGA GTTTGGACAT 300
 45 TCTATCAATG ATTATTCAT ATCTCCGAT GGGCAGTTTA TTCTCTAGA ATACAACATC 360
 GTGAAGCAAT GGAGGCATTC CTACACAGCT TCATATGACA TTTATGATTT AATAAAGG 420
 CAGCTGATTA CAGAAGAGAG GATTCCAAAC AACACACAGT GGGTCACATG GTACCCAGTG 480
 GGTCAATAAT TGGCATAAT TTGGAACAAAT GACATTTATG TTAATAATGA ACCAAATTTA 540
 CCAAGTTACA GAATCACATG GACGGGGAAG GAAGATATAA TATATAATGG AATAACTGAC 600
 50 TGGGTTTATG AAGAGGAAGT CTTCACTGCC TACTCTGCTC TGTGGTGGTC TCCAAACGGC 660
 ACITTTTATG CATATGCCCA ATTTAAAGAC ACAGAAGTCC CACTATTTGA ATACTCCCTC 720
 TACTCTGATG AGTCACTGCA GTACCCCAAG ACCTGACGGG TTCCATATCC AAGGCGAGGA 780
 GCTGTGAATC CACTCTTAAA GTTCTTTGTT GTAAATACAG ACTCTCTCAG CTCAGTCACC 840
 AATGCAACTT CCATACAAAT CACTGCTCCT GCTTCTATGT TGATAGGGGA TCACACTCTG 900
 55 TGTGATGAG CATGCGGAT ACAAGAAAGA ATTTCTTTCG AGTGGCTCAG GAGGATTCAG 960
 AACTATTCCG TCATGATAT TTGAGACTAT GATGAATCCA GTGGAAGATG GAAGTCTTA 1020
 GTGGCAGGGC AACACATTGA AATGAGTACT ACTGGCTGGG TTGGAAGATT TAGGCCCTCA 1080
 GAACCTCAT TTACCTTTGA TGGTAATAGC TTCTACAAGA TCATCAGCAA TGAAGAAGT 1140
 TACAGACACA TTGCTATTT CCAATAGAT AAAAAGACT GCACATTTAT TACAAAAGGC 1200
 60 ACCTGGGAAG CATGCGGAT AGAAGCTCTA ACCAGTGATT ATCTATACTA CATTAGTAAT 1260
 GAATATAAAG GATGUCAGG AGGAAGGANT CTTTATAAAA TCCAACTTAG TGAATATCA 1320
 AAAGTGACAT GCCTCAGTTG TGAGCTGAAT CCGGAAGGT GTCACTACTA TTCTGTGTCA 1380
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 ACTCTACACA GCAGCGTGAA TGATAAAGGG CTGAGAGTCC TGGAGACAAA TTCAGCTTTG 1500
 65 GATAAATGTC TGCAAGATGT CCAGATGCCC TCCAAAAAAC TGGACTTCAT TATTTTGAAT 1560
 GAAACAAAAT TTTGGTATCA GATGATCTTG CCTCTCTATT TTGATAAATC CAAGAAATAT 1620
 CCTCTACTAT TAGATGTGTA TGCAGGCCCA TGTATGCAAA AAGCAGACAC TGTCTTCAGA 1680
 CTGAACCTGG CCACTTACCT TGCAAGCACA GAAAACATTA TAGTAGCTAG CTTTGATGGC 1740
 AGAGGAAGTG GTTACCAGAG AGATAAGATC ATGCTATGCA TCAACAGAAG ACTGGGAACA 1800
 70 TTTGAAGTTG AAGATCAAAAT TGAAGCAGCC AGACAATTTT CAAAAATGGG ATTTGAGGAC 1860
 AACAAACGAA TTGCAATTTG GGGCTGGTCA TATGGAGGGT ACGTAACCTC AATGGTCTCT 1920
 GGATCGGGAA GTGGCGTGTT CAAGTGTGGA ATAGCCCTGG CGCCTGTATC CCGGTGGGAG 1980
 TACTATGACT CAGTGTACAC AGAAGCTTAC ATGGGTCTCC CAACTCCAGA AGACAACCTT 2040
 GACCATTACA GAAATCAAC AGTCATGAGC AGAGCTGAAA ATTTTAAACA AGTTGAGTAC 2100
 75 CTCTEATTC ATGGAACAGC AGATGATAAC GTTCACITTC AGCAGTCAGC TCAGATCTCC 2160
 AAAGCCCTGG TCGATGTTGG AGTGGATTTT CAGGCATATG GGTATACGTA TGAAGACCAT 2220
 GGAATAGCTA GCGACACAGC ACACCAACAT ATATATACCC ACATGAGCCA CTTCATAAAA 2280
 CAATGTTTCT CTTTACCTTA G

Seq ID NO: 590 Protein sequence
 Protein Accession #: NP_001926.1

80 1 11 21 31 41 51
 MKTPWKILLG LGAAALVTI ITVPVVLNKK GTTADATDSR KTYTLMDYIK NTRYLKLYSL 60

RNISDREYLY KQENNILVFN AEYGNSSVFL ENSTFDEFGH SINDYSISPD GQFILLENY 120
 VKQNRHSYTA SYDIYDLNKR QLITEERIPN NTQWVTHSPV GHKLAYVWNN DIYVKIEPNL 180
 PSYRITWTGK EDITVINGITD WUYEEVFSA YSALWNSENG TFLAYAQFND TEVPLIEYSF 240
 YSDESQYQPK TVRVPPKAG AVNPTVKFFV VNTDSLSSVT NATSIQITAP ASMLIGDEYL 300
 CDVWATQER ISLQWLRRITQ NYSVMDICDY DESSGRWNCL VARQHIEMST TGVVGRFRPS 360
 EPHFTLDGNS FYKIIISNEG YRHICYFQID KKDCTFITKG TWEVIGIEAL TSDYLYYISN 420
 FYKMPGGRN LYKIQLSOYT KVTCLSCBLN PERCQYYSVS FSKEAKYQUL RCSGPGLPLY 480
 TLHSSVNDKG LRVLEDNSAL DKMLQNVQMP SKKLDFFILN ETKFWYQML PPHFDKSKKY 540
 PLLLDVYAGP CSQKADTVFR LNWATYLAST ENITVASFDG RSGGYQGDKI MHAINRRLGT 600
 FEVEDQIEAA RQFSKMGFVD NKRIAIWGS YGGVVTSMVL GSGSGVFKCG IAVAPVERWE 660
 YDVSVYTERY MGLFTPEDNL DHYRSTVMS RAENFKQVEY LLINGTADDN VHFQQAQIS 720
 KALVDVGVD FQAMWYDEDH GIASSTARQH IYTHMSHFIX QCFSLP

Seq ID NO: 591 DNA sequence

Nucleic Acid Accession #: NM_016077.1

Coding sequence: 128..667

1 11 21 31 41 51
 TCGCTTTGTG ATTCCTTGATC CGGAACCTTG TCACCCAGGA ACCCCGGAAG AGGTAGCTCA 60
 CGCGATAGAA ACGTGTTCGC TTGCCCCAGAA GAAGGGAAGG CGCGAGTGAG GAAAGGAGGT 120
 ACTGTAGATG CCTCCAAAT CCTTGGTTAT GGAATATTG GCTCATCCCA GTACACTCGG 180
 CTTGGCTGTT CGAGTTGCTT GTGGCATGTG CTGGGCTGG AGCCTTCGAG TATGCTTTGG 240
 GATGCTCCCC AAAAGCAAGA CGAGCAAGAC ACACACAGAT ACTGAAAGTG AAGCAAGCAT 300
 CTTGGGAGAC AGCGGGAGT ACAGATGAT TCTTGTGGTT CGAAATGACT TAAAGATGGG 360
 AAAAGGGAAA GTGGCTGCCC AGTGTCTCA TGCTGCTGTT TCAGCCTACA AGCAGATTCA 420
 AAGAAGAAAT CCTGAAATGC TCAACAATG GGAATACGT GGCCAGCCCA AGGTGGTGGT 480
 CAAAGCTCCT GATGAAGAAA CCCTGATTCG ATTATGGCC CATGCAAAA TGCTGGGACT 540
 GACTGTAGT TTAATTCAG ATGCTGGAG TACTCAGATT GCACCAGGCT CTCAAACTGT 600
 CACTGGGATT GGGCCAGGAC CAGCAGACCT AATTGACAAA GTCACTGGTC ACCTAAACT 660
 TTACTAGGTG GACTTTGATA TGACAACAAC CCTCCATCA CAGTGTGTTG AAGCCTGTCA 720
 GATTCTAACA ACAAAGCTG AATTCTTCA CCAACTTAA ATGTTCTTGA GATGAAATA 780
 AAACCTATTC CCAATTTCTA AAAAA

Seq ID NO: 592 Protein sequence

Protein Accession #: NP_057161.1

1 11 21 31 41 51
 MPKSLVMEY LARPSTLGLA VGVACGMCLG WSLRVCFGML PKSKTSKTHT DTESEASILG 60
 DSSEYKMLV VRNDLKMKGK KVAACQSHAA VSAYKQIQR NEMLKQNEY CGQPKVVVKA 120
 PDETLIALL AHAKMLGLTV SLIQDAGRTQ IAPGSQTVLG IGPFPADLID KVTGHLKLY

Seq ID NO: 593 DNA sequence

Nucleic Acid Accession #: FGENESH predicted

Coding sequence: 1..1896

1 11 21 31 41 51
 ATGCGCGCCG TGCGCGTGCC CGCCCGGCTC CTGCGCTGCG TGCTGCTCGC GCTCCTGGCC 60
 GCTCCCGCCG CCGCGCCAG CAGAGCCGAG TCCGTCTCGG CGCGCTGGCC CGAACCCGAG 120
 CGGAGTCCG GCGCCCGCC CCGCCCGGGG CCGCGGAACA CCACCCGGTT TGGGTCTGGG 180
 GCGCGCGCGG CGAGCGGCAG CTCAGCTCC AACAGCAAGT GCGACGCCCT GGTGACCCGC 240
 ATTTCATCC TCTTCGCGA CCTACCCACC CTCAGGCGAG CCGTGATCGT GCGGTTCGCC 300
 TTATCCACCC TCTCATCGC CTGCTGCTG CTGCGCTGCT TCAGGTCCGG AAAGAGTTTA 360
 AAGAGACAC GCAGATATGA TATCATCACC ACTCCAGCAG AGCGAGTGGG AATGGCGCCA 420
 CTAAATGAAG AGGATATGA AGATGAGGAC TCCACAGTAT TCGACATCAA ATACAGAGTG 480
 TCTTGCCGG CAGCATGAG ACGTCAGCTG CCAGGGTGCC AGACGCTACT GACAGTTCTT 540
 GTGCCCCAC CCTTCATCCT CGACATTGAC CTTCCAGCAA GATGCAAGT AAGGCTGAT 600
 GGTGGAATCA GACCTGGTAA AACCTGTTT CCAGCCTGGT GGCATCCTGT GGAAGTTGG 660
 TCAGCTGCAA CTTGGGGTGT GAAGGACTGG ACCTGGAAGC CTTCTTGGT CGGAGGTGTT 720
 GAAACCAAAA CGAACGTTAT GTATAAAACC CCAGCTCCAT CGTGGGTGTC AGGCATCTGC 780
 TCAGACGTC ACTGGCAGC TCGTTCACG GTCACCACAA TGGAGTGTCT TCTGCCACCC 840
 TTTGGGCATC CTTTAAAGT GCGCCCTACT TCTACICCCC ATGGTTTTCG ACAACTGCAG 900
 CTGAATCTCA TGGAAAGCT GATTCTCTT GCGTTACGCA GAAACACCCG GGCTCCATCT 960
 GCGAGGTGCT TGCCACTGGT CTTGGCAGAA ATGGCGGCTG CTGAAAGTGA CCTTCCAAAT 1020
 CTTGGTGGC ACTTCAGCG CACAGGCTCT CCAATAAAAA CCTTTACAC ACAAAOCATG 1080
 AGTACCTTGG SCTTGGATGT TTCTGTGGT GCGGCGCAGC GGGGCACCTT TTGTGAAGAC 1140
 AGAGCAGTGA CTAAAGTTCT CCAGGGTAGC TCTTTCTCCA AACAGCTGCG CTGGAAGCCA 1200
 GCGCTAGAGA TCGGTTTCC CCATCATCTC AGGCTTCTCA GAGAGTGTCC TCCGCTGAGC 1260
 ACCATCTCTG TCGGTTGGC TCGTTCAGAT GCGCGGGCAG AAGCCAGCCT GACGGGGAGG 1320
 AGGGTGTTCG GCGCTCCGCG CGAGTCTCTG CATGGCGGAG GGTACAGGGG TACCGCAACT 1380
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 CACCTGTGAG GAGACTTGGG TGGGGTGGCA AATTCTATT TGGAGGAAGA GGGTTTCCAG 1740
 GATGGCAGAT GCGAGAGAT GGTCTGTATG TCTGAGGAAG GGCCACCTAG TTTGACAGGA 1800
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Seq ID NO: 594 Protein sequence

Protein Accession #: FGENESH predicted

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1      11      21      31      41      51
|      |      |      |      |      |
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KKTRKYDIIT TPAERVEMAP LNEEDDEDED STVFDIKYRV SLPAALRRQL EGCQTLLITVP 180
VPPPPFIIDID LPARCSGRPD GGIRPGKICF PAWHPVSW SAATNGVKDW TWKPSCVGGV 240
ETKTNVMYKT PAPSCVSGIC SDCHNQAREH VTTMELLPP FGHFFKVPPT STPHGFRQLQ 300
10  LNLMEKLDSS ALRRNTRAPS ARCLPLVLAE MAAAESDLN PWHEFSATGS FIKTLYTQTM 360
STLGLDVFQ AGQGRFTCEK RAVTKVLQSS SFSKQLRWKF ALESFPFHEL RLLRECPPLS 420
THPVLRLARD ARQASLTGR RVFRPRQSL EGGSSAGTAT CLLVLKILLR RHPHLDLPYK 480
ICLPCCAVEH LREAKRESVT VLASFQSEFQ KAAAAHGEPV KRGPFGQLTR HTCPGFWGTH 540
ANLQTIPTDQ GQSGPREDVT HPGGDLQDVA NFYLEESGFO DGRCCQKMLIA SEEGPSPBLTG 600
15  CERLTGSHHF SSSKSNMSEFL SPRQPLFLER P

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Seq ID NO: 595 DNA sequence
Nucleic Acid Accession #: NM_021614.1
Coding sequence: 1..1740

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25  GGAAGAGGTG GCGGCGGCTC CTCCCGTCT GCAGCGCGTG CGCGCGCGC CGCTGTTTCG 180
TCCTCAGCCC CGAGATCGT GGTGTCTAAG CCCGAGCACA ACAACTCCAA CAACCTGGCG 240
CTCTATGAAA CGCGCGCGG AGGCAGCACT GGAGGAGCGG GCGGCGGTGG CGGAGCGCGG 300
CACGGCAGCA GCAGTGGCAC CAGTCCAGC AAAAAAGAAA ACCAGAACAT CGGCTACRAG 360
CTGGGCCACC GCGCGCGCTT GTTCGAAAAG CGCAAGCGGC TCAGCGACTA CGCGCTCATC 420
30  TTCCGCTGTG TCAGCATCGT GGTGATGGTC ATCGAGACCG AGCTGTCTG GGGCGCTTAC 480
GACAGGGCGT CGCTGTATTC CTTAGCTCTG AAATGCCCTA TCAGTCTCTC CACGATCATC 540
CTGCTCGGTC TGATCATCGT GTACACGCC AGGGAATAC AGTTGTTCAT GGTGGCAAT 600
GGAGCAGATG ACTGGAGAAT AGCCATGACT TATGAGCGTA TTTCTTCAT CTGCTGGAA 660
ATACTGGTGT GTGCTATTCA TCCCATACCT GGAATATATA CATTCACATG GACGCGCGCG 720
35  CTGCGCTTCT CCTATGCCCC ATCCACAACC ACCGCTGATG TGGATATTAT TTTATCTATA 780
CCAATGTCTT TAGACTCTA TCTGATTGCC AGAGTCATGC TTTTACATAG CAACCTTTTC 840
ACTGATGCCT CCTCTAGRAG CATTGGAGCA CTTAATAAGA TAAACTTCAA TACAGTTT 900
GTTATGAAGA CTTAATGAC TATATGCCCA GGAAGTGTAC TCTGGTTTT TAGTATCTCA 960
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40  GTTACTAGCA CTCTCTTGG AGCGATGTGG TTGATATCAA TAACTTTCT CTCCRTTGGT 1080
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45  AAAAAAGATA ATCATGCAAA AGTAAGAAA CATCAACGAA AATTCCTGCA AGCTATTGAT 1380
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GAAGACTTCG AGAAGAGGAT TGTACCTCT GAAACAAAAC TAGAGACTTT GATTGGTAG 1560
ATCCAGCGCC TCCCTGGGCT CATAGGCCAG ACCATCAGGC AGCAGCAGAG AGATTTCAT 1620
50  GAGGCTCAGA TGGAGTACA CGACAGCAC GTCACTTACA ATGCTGAGCG GTCCGCTCC 1680
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Seq ID NO: 596 Protein sequence
Protein Accession #: NP_067627.1

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SSAPRIIVSK PEHNNSNNLA LYTGGGGSET GGGGGGGGSG HSSSSGTSKS KKNQNIQYK 120
60  LGRRALFEK RKRSLDYALI FGMFGIVVMV IETELSWGAY DKASLYSLAL KCLISLSTII 180
LLGLIIVYHA REIQLFMVND GADDWRIAMT VERIFFICLE ILVCAIHPIP GNYTFWTAR 240
LAFSYAPSTT TADVDILLSI FMFLRLXIIA KVMILLHSKLF TDASSRSIGA LNKINFNTRF 300
VMKTLMTICP GTVLLVPSIS LNIIAAWTVR ACERYHDQDQ VTSNPLGAMW LISITPLSIG 360
YGDWVFNTYC GKGVCLLTGI MGAGCTALVV AVVARKLEIT KAEKHVNFM MDTQLTKRVK 420
65  NAAANVLRET WLIYKNTKLK KCIDFAKVRK HQRKPLQAIH QLRSVKMEOR KLMDQANTLV 480
DLAKTNQIMY DMISDLNERS EDFEKRIYTL ETKLETLIGS IHALPGLISQ TIRQQQDFI 540
RAQMEGYDKH VIYNAERSRS SSRRRSSSET APPTSSESS

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Seq ID NO: 597 DNA sequence
Nucleic Acid Accession #: NM_015029.1
Coding sequence: 228..1097

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TGCTCTGTCT CTCTGTGAG CTGCTGCGCT TCTTGAGGCG TGACGGGAGC CTGACGCTAC 180
TATGGGCGCA GTGGCAGGGA CGACGCCAGG AATGGGAGCT GACTGATATG GTGTGTGUGG 240
TGACTGGAGC CTGAGTGGG ATTGGTGAGG AGCTGGCTTA CCAGTTGTCT AAAGTAGGAG 300
78  TTTCTCTTGT GCTGTGAGC AGAAGAGTBC ATGAGCTGGA AAGGSGTAAA AGAAGATGCC 360
TAGAGATATG CAATTAATAA GAAAAAGATA TACTTGTTTT GCCCCTTGAC CTGACCGACA 420
CTGGTTCCCA TGAAGCGGCT ACCAAGCTG TTTCTCAGGA GTTGTGTAGA ATCGACATTC 480
TGGTCAACAA TGGTGAATG TCCAGCGGTT CTCTGTGCAT GGATACAGC TTGGATGTCT 540
ACAGAAAGCT AATAGAGCTT AACTACTTAG GGACGGTGTC CTTGACAAAA TTGTTCTGCT 600
80  CTCACATGAT CGAGAGGAAG CAAGGAAGA TTGTTACTGT GAATAGCATC CTGGGATACA 660

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TATCTGTACC TCITTCATT GGATACTGTG CTAGCAAGCA TGCTCTCCGG GGTITTTTAA 720
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 GAUCTGTGCA ATCAAAATAT GTGCGAATTT CCTAGCTGG AGAAGTCACA AAGACTATAG 840
 GCAATAATGG AGACCACTCC CACAAGATGA CAACCACTCG TTGTGTGCGG CTGATGTATA 900
 TCAGCATGGC CAATGATTTG AAAGAAGTTT GATCTCAGA ACAAACCTTC TTGTAGTAA 960
 CATATTTGTG GCAATACATG CCAACCTGGG CCTGGTGGAT AACCAACAAG ATGGGGAGA 1020
 AAAGGATTGA GAACPTTAAG AGTCGTGTGG ATGCAGACTC TTCTTATTTT AAAATCTTTA 1080
 AGACAAACA TGACTGAAA GAGCACCTGT ACTTTCAAG CCACCTGGAG GAGAAATGGA 1140
 AAACATGAAA ACAGCAATCT TCITATGCTT CTGAATAATC AAAGACTAAT TTGTGATTTT 1200
 ACTTTTAAAT AGATATGACT TTGCTTCCAA CATGGAATGA AATAAAAAAT AAATAATAAA 1260
 AGATTGCCAT GAATCTGCA AA

Seq ID NO: 598 Protein sequence
 Protein Accession #: NP_057113.1

1 11 21 31 41 51
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 ATKAVLQEPFG RIDILVNWNG MSQRSLCMTT SLDVYRKLIE LNYLQTVSLT KCVLPHMIE 180
 KQKKTVTVNS ILGILSVPLS IGYCASKHAL RGFNGLRTE LATYFGIIVS NICPGFVQSN 240
 IVENSAGEV TKTIGNNGDQ SHKMTTSRCV RLMLISMND LKEVWISBP FLVTVLWQY 300
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Seq ID NO: 599 DNA sequence
 Nucleic Acid Accession #: NM_000793.2
 Coding sequence: 401..1222

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 GCACATTTAA AAAAAAAAAA CTCTGGCAAT TCAAGAAAGA AACAGGCTAC GTTTAAAGAG 240
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25	CATCAGACAT	GGAGAATGAG	CCATTTGTCT	TTCAATTTTG	CTGAGTGTAT	TTTACTATTT	4680
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30	GGACATTTGT	TCCACCCGAC	CTCTGACTGA	TGGTTTGGAA	AATAACTTTA	ATTAGGATCA	4980
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	AAAACCTTTA	CTAGCATTTA	GAGCTTTTCA	GAACATCCCT	ACTGTCTAGT	GTCTCAGCAG	5100
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	TAAATGGTAT	GGCCAAAAGT	CAGAGTTAAA	ATATATATAG	TTAGATTCCA	ACTTCCCTCT	5220
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50	AAGAGTCACAT	CTCAGTCAGT	AGTGGTTTGA	TGTAGTCACA	TTAGTTTGCC	TCTCCCATCT	6180
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	GTGAGAAATG	AGCGGTGCTAT	ATGCTACACA	TATGTGCTTC	TCAGTTGCAG	AAAATGAATC	6300
	GCCTTGGGAG	ATTATCACTA	GAAAGAGTGT	TATCATATTG	GTGCTGAGTG	CTATGTGTGC	6360
55	TTATACAATT	TGTTCTGTGA	TTTTAATAAA	CTTTGAATAA	AAGAATAAAA	AAAAAATAAA	6420

Seq ID NO: 600 Protein sequence
Protein Accession #: NP_000784.2

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	RCVWKSFLID	AYKQVRLGED	APNSSVHVVS	STEGGDNSGN	GTQEKTAEGA	TCHLLDPASP	120
	ERPLVNFEGS	ATUPPPTSQ	PAFRKLVEEF	SSVADFLVY	IDEAHESDGN	AIPGDSLSLF	180
65	EVKIHQDQED	RCAAAQQLLE	RFSLPFCRV	VADRMNNAN	IAYGVAFERV	CIVOROKIAY	240
	LGGKGPFSYN	LQEVRENHLEK	NFSKRUKKTR	LAG			

Seq ID NO: 601 DNA sequence
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Coding sequence: 101..3052

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	CAATGAAGTC	AATCTACTGG	ATTCAAAAAC	AATTCAAGGG	GAGCTGGGCT	GGATCTCTTA	240
	TCATACACAT	GGGTGGGAAG	AGATCAGTGG	TGTGGATGAA	CATTACACAC	CCATCAGGAC	300
	TTACCAGGTG	TGCAATGTCA	TGGACCCAGG	TCAAAACAAT	TGGCTGAGAA	CAAACTGGGT	360
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	TGATGATGAT	CATGGGGTGA	AATTTGAGCA	GCATCAGTTT	ACAAAGATTG	ACACCATGTC	540
	AGCTGATGAA	AGTTTCACTC	AAATGGATCT	TGGGACCGT	ATTCTGAAGC	TCAACACTGA	600
	GATTAGAGAA	GTAGGTCCTG	TCAACAAGAA	GGGATTTTAT	TTGGCATTTT	AAGATGTTGG	660
	TGCTGTGTGT	GCCTTGGTGT	CTGTGAGAGT	ATACCTTCAA	AAGTGCCCAT	TTACAGTGAA	720

5	GAATCTGGCT	ATGTTTCCAG	ACACGGTACC	CATGGACTCC	CAGTCCCTGG	TGGAGGTTAG	780
	AGGGTCTTGT	GTCAACAATT	CTAAGGAGGA	AGATCCTCCA	AGGATGTACT	GCAGTACAGA	840
	AGGGCAATGG	CTTGATCCCA	TTGGCAAGTG	TTCCCTGCAAT	GCTGGCTATG	AAGAAAGAGG	900
	TTTTATGTGC	CAAGCTTGTC	GACCAGGTTT	CTACAAGGCA	TTGGATGGTA	ATATGAAGTG	960
	TGCTAAGTGC	CCGCTCACA	GTCTACTCA	SGAAGATGGT	TCAATGAAGT	SCAGGTGTGA	1020
	GAATRAATTAC	TTCCGGGCAG	ACAAAGACCC	TCCATCCATG	GCTTGTATCC	GACCTCCATC	1080
	TTCAACAAGA	AATGTTATCT	CTAATATAAA	CBAGACCTCA	GTTATCCTGG	ACTGGAGTTG	1140
	GCCCCGTGAC	ACAGGAGGCC	GGAAAGATGT	TACCTTCAAC	ATCATATGTA	AAAAATGTGG	1200
10	GTGGAATATA	AAACAGTGTG	AGCCATGCAG	CCCAATGTTC	CGCTTCCCTC	CTCGACASTT	1260
	TGGACTCACC	AACACCAAGG	TGACAGTGAC	AGACCTTCTG	GCACATACTA	ACTACACCTT	1320
	TGAGATTTGAT	GCCGTTAATG	GGGTGTGAGA	GCTGAGCTCC	CCACCAAGAC	AGTTTGTCTG	1380
	GGTCAGCATC	ACAATTAATC	AGGCTGCTCC	ATCACCTGTC	CTGACGATTA	AGAAAGATCG	1440
	GACCTCCAGA	AATAGCATCT	CTTTGTCTGT	GCAAGAACCT	GAACATCCTA	ATGGGATCAT	1500
15	ATTGGACTAC	GAGGTCAAAT	ACTATGAATA	GCAGGACAAA	GAAACAAGTT	ATACCATCTT	1560
	GAGGGCAAGA	GGCACAATG	TTACCATCAG	TAGCCTCAAG	CCTGACACTA	TATACGTATT	1620
	CCAAATCCGA	GCCGAAACAG	CCGCTGGATA	TGGGACGAAC	AGCCGCAAGT	TTGAGTTTGA	1680
	AACTAGTCCA	GACTTTTCTT	CCATCTCTGG	TGAAAGTAGC	CAAGTGGTCA	TGATCGCCAT	1740
	TTCAAGCGCA	GATGACAATA	TTCTCTCTAC	TGTTGTCTAT	TATGTTTGA	TTGGGAGGTT	1800
20	CTGTGGCTAT	AAGTCAAAAC	ATGGGCGAGA	TGAAAAGAGA	CTTCATTTTG	GCAATGGGCA	1860
	TTTAAACTTT	CCAGGTCTCA	GGACTTATGT	TGACCCACAT	ACATATGAAG	ACCCTACCCA	1920
	AGCTGTTTAT	GAGTTTGCCA	AGGAATTGGA	TGCCACCAAC	ATATCCATG	ATAAAGTTGT	1980
	TGGAGCAGGT	GAATTTGAG	AGGTGTGAG	TGCTCGCTTA	AAACTTCTTT	CAAAAAAGAA	2040
	GATTTTCAAG	GCCATTAAAA	CCCTGAAAGT	TGGCTACAGA	GAAAGCAGA	GGAGAGACTT	2100
25	CCTGGAGAGA	CTGAGCAATA	TGGGACAGTT	TGACCAACCC	ANTATCATTC	GACTGGAGG	2160
	AGTTGTTACC	AAAAGTAAGC	CAGTTATGAT	TGTCACAGAA	TACATGGAGA	ATGGTTCTCT	2220
	GGATAGTTTC	CTACGTAAAC	ACGATGCCCA	GTTTACTGTC	ATTGAGCTAG	TGGGGATGCT	2280
	TCGAGGGATA	GCATCTGGCA	TGAAGTACCT	GTGACACATG	GGCTATGTTT	ACCGAGACCT	2340
	CCCTGCTCGG	AACATCTTGA	TCAACAGTAA	CTTGGTGTGT	AAGGTTCTGT	ATTTCGGACT	2400
30	TTGCGGTGTC	CTGAGGATTA	ATCCAGAAGC	TGCTTATACA	ACHAGAGGAG	GGAAGATCCC	2460
	AATCAGGTGG	ACATCACCAG	AAGCTATAGC	CTACCGCAAG	TTCACTGTAG	CCAGCGATGT	2520
	ATGAGATTTAT	GGGATTTGTC	TCTGGGAGGT	GATGTCTTAT	GGAGAGAGAC	CATACCTGGG	2580
	GATGTCCAAT	AGATGAGTAA	TAAAGCTGT	AGATGAGGAC	TATCGACTGC	CACCCCCCAT	2640
	GGACTGCCCA	GCTGCTCTGT	ATCAGCTGAT	GCTGGACTGC	TGGCAGAAAG	ACAGGAACAA	2700
35	CAGACCCAG	TTTGAAGAGA	TTGTTAGTAT	TCTGGACAAG	CTTATCCGGA	ATCCCGCAG	2760
	CCTGAAGATC	ATCACCAAGT	CAGCCGCAAG	GCCATCAAC	CTTCTCTCTG	ACCAAAGCAA	2820
	TGTTGATATC	TCTACCTTCC	GCACAACAGG	TGACTGGCTT	AATGGTGTCC	GGACAGCACA	2880
	CTGCAAGGAA	ATCTTCAAGG	GCCTGGAGTA	CAGTTCTTGT	GACACAATAG	CCAAGATTTC	2940
	CACAGATGAC	ATGAAAAGAG	TTGGTGTGAC	CGTGGTGGG	CCACAGAGA	AGATCATCAG	3000
40	TAGCATTAAG	GCTCTAGAAA	CGCAATCAAA	GAATGGCCCA	GTTCCCGTGT	AAAGCACGAC	3060
	GGAAGTGCTT	CTGAGCGGAA	GTGGTGGCTG	TGGAAGGCGT	CAGTCATCC	TGCAGACAGA	3120
	CAATAATTCT	GGAGATATCT	GTGGAAGTT				

Seq ID NO: 602 Protein sequence
Protein Accession #: NP_005224.1

45	1	11	21	31	41	51	
	MDCQLSILL	LSCSVLDSFG	ELIPQPSNEV	NLLDSKTIQG	ELGWISYPSEH	GWEEISGVDE	60
50	HYTPIRTYQV	CNVMDSQNN	WLRINWVPRN	SAQKIYVELK	FTLRDCNSIP	LVLGTCKETF	120
	NLYYMESDDD	HGVKPREHQF	TKIDYIAADE	SPTQMDLGDR	ILKJLNTZIRE	VGFVNKKGFY	180
	LAFQDVGACV	ALVSVRVYFK	KCFPTVKNLA	MFPDITVEMDS	QSLVEVRGSC	VNNSKBEDPP	240
	RMYCSTEGEW	LVPIGKCSGN	AGYZERGFMG	QACRPGFYKA	LDGNMKCAKC	PPHSSTQEDG	300
	SMNCRCSNNY	FRADKPPSPM	ACTRPPSPSR	NVISININETS	VILDWSEWFLD	TGGRKDVTFN	360
55	IICKKCGWNI	RCCEPCSPNV	RFLPRQFGLT	NTTVTVIDL	ARNTVTFEID	AVNGVSELSS	420
	EPFQFAAVSI	TTNQAAAPSPV	LTIKKQETSR	NSISLSWQBP	EHENGIIILDY	EVKYYEKQEQ	480
	ETSYYTLIRL	GTNVTTISLLK	PDITVYVFQIR	ARTAAAGYGTN	SRKPEFETSPF	DSFSPISGBSS	540
	QVVMIAISAA	VAILLLTVVI	YVLIGRFQGY	KSKHGADKKR	LHFGNGHLKL	PLRLTYVDPE	600
	TYSDPTQAVH	EFAKELDATN	ISIDKVVVAG	EFGEVCSGRL	KLPSKKKISV	AKTKLVKGYT	660
60	EKQRDLFAGE	ASIMGQFDHP	NIIRLEGVVT	KSKPVMIVTE	YMGSLDSF	LKHDAQPTV	720
	IQVGMILRGI	ASGMKYLSDM	GVVHRDLAAR	NILINSNLVC	XVSDPGLSRV	LEDDPEAAAT	780
	TRGGKIPIRW	TSPEAIAYRK	FTSASDVNSY	GIVLNEVMSY	GERPYWMSN	QDVIRAVDEG	840
	YRLPEPMDCP	AALYQLMLDC	WQKDRNMRPK	FEQIVSILDK	LYRMPGSLKI	ITSAAARPSN	900
	LLLDQSNVDI	STFRTTGDWL	NGVRTABCKE	IFTGVETSSC	DTIAKISTTD	MEKGVTVTVG	960
65	PQKILISLIK	ALSTQKNGP	VFV				

Seq ID NO: 603 DNA sequence
Nucleic Acid Accession #: NM_005727.1
Coding sequence: 122..847

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	GCCAGGCGTC	CCTCTGCTCG	CCCACTCAGT	GGCAACACCC	GGGAGCTGTT	TTGTCCCTTG	60
	TGGAGCCTCA	GCACTTCCCT	CTTTCAGAAC	TCATGCGCAA	GAGCCCTGAA	CAGGAGCCAC	120
75	CATGCAAGTC	TTGAGCTTCA	TTAAGACCAT	GATGATCCTC	TTCAATTGTC	TCACTTCTTC	180
	GTGTGGTGCA	GCCTCTGTGG	CAGTGGGCAT	CTGGGTGTCA	ATCGATGGGG	CATCCTTCTT	240
	GAAGATCTTC	GGGCCACTGT	CGTCCAGTGC	CATGCAGTTT	GTCAACGTGG	GCTACTTCTT	300
	CATGCGAGCC	GGGTTTGTGG	TCTTTGCTCT	TGGTTTCTTG	GGCTGCTATG	GTGCTAAGAC	360
	TGAGAGCAAG	TGCGCCCTCG	TGACGTTCTT	CTTCATCCTC	CTCCTCATCT	TCAATGCTGA	420
80	GGTTGAGCT	GCTGTGCTGG	CCCTGGGTGA	CACCACAATG	GCTGAGCACT	TCCTGACGTT	480
	GCTGGTAGTG	CCTGCCATCA	AGAAAGATTA	TGGTTCCGAG	GAAGACTTCA	CTCAGTGTG	540
	GAACACCCAC	ATGAAGAGGC	TCAAGTGTCT	TGGCTTCACC	AACTATACGG	ATTTTGAGGA	600
	CTCACCTTAC	TTCAAGAGAG	ACAGTGCCTT	TCCCTCATTC	TGTTGCAATG	ACAACGTAC	660
	CAACACAGCC	AATGAACCTT	GCACCAAGCA	AAAGGCTCAC	GACCAAAAAG	TAGAGGTTG	720
	CTTCAATCAG	CTTTTGTATG	ACATCGGAC	TAATGCAGTC	ACCGTGGTGG	GTGTGGCAGC	780

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TGGAAATTGGG GGCCTCGAGC TGGCTGCCAT GATTGTGTCC ATGTATCTGT ACTGCAATCT 840
ACAAATAAGTC CACTTCTGCC TCTGCCACTA CTGCTGCCAC ATGGGAACCTG TGAAGAGGCA 900
CCCTGGCAAGC CAGCAGTGAT TGGGGGAGGG GACAGGATCT AACAAATGTC CTGGGGCCAG 960
AATGGACCTG CCCTTTCTGC TCCAGACTTG GGGCTAGATA GGGACCACTC CTTTTAGGGG 1020
ATGCTCTGACT TTCTTTCCAT TGGTGGGTGG ATGGGTGGGG GGCATTCCAG AGCCTCTAAG 1080
GTAGCCAGTT CTGTGGCCCA TTCCCCCACT CTATTAACCC CTGTATATGC CCCCCTAGCC 1140
TAGTGTGTAT CCCAGTGCTC TACTGGGGGA TGAGAGAAAG GCATTTTATA GCCTGGGCAT 1200
AAGTGAATC AGCAGAGCCT CTGGGTGGAT GTGTAGAAGG CACTTCAAAA TGCATAAAC 1260
TGTTACAATG TTAATAAA

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Seq ID NO: 604 Protein sequence
Protein Accession #: NP_005718.1

1 11 21 31 41 51
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1 MQCPSEFIKTM MILFNLLIFL CGAALLAVGI WVSIDGASFL KIFPEPLSSA MQFVNVGIFL 60
11 IAAAGVVVPL GLGCVGART ESKCALVTFF FILLIFIAE VAAAVVAIVY TMAEHFLTL 120
21 LVVPAIKKDY GSQDFTQVW NITMKGLKCC GFTNYTDFSD SPYFKENSAF PFPCNDNVN 180
31 NTANETCTBQ KARDQKVEGC FNQLLYDIRT NAVTVGGVAA GIGGLELAAM IVSMYLYCNL 240
41 Q

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Seq ID NO: 605 DNA sequence
Nucleic Acid Accession #: NM_000729.2
Coding sequence:

1 11 21 31 41 51
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1 GGCTCAGCTG CGGGCTGCT CGGGTTGGAA ACGCCAAGCC AGCTGCCGTC CTAATCCAAA 60
11 AGCCATGAAC AGCGCGGTGT GCTGTGTGCT GCTGATGGCG GTACTGGCGG CTGGCGCCCT 120
21 GACGCGAGCG GTGCTCTCCG CAGATCCCGC GGGCTCCGGG CTGCGAGCGG CAGAGGAGGC 180
31 GCCCGTAGG CAGCTGAGGG TATCGCAGAG AACGGATGGC GAGTCCCGAG CGCACCCTGG 240
41 CGCCCTGCTG GCAAGATACA TCCAGCAGGC CCGGAAAGCT CCTTCTGGAC GAATGTCCAT 300
51 CGTTAAGAAC CTGCGAACC TGGACCCGAG CCACAGGATA AGTGACCGGG ACTACATGGG 360
11 CTGGATGGAT TTGGCTGCTC GCAGTGGC3A GAGTATGAG TACCCCTCCT AGAGGACCCA 420
21 GCCGCCATCA GCCCAACGGA AGCAACCTCC CAACCCAGAG GAGGCAGAAAT AAGACAACAA 480
31 TCACACTCAT AACTCATTTG CTGTGGAGTT TGACATTGAA TGTATCTATT TATTAAAGTT 540
41 TCAATGTGAA AATTGTGTCT GTAAGATTGT CCAGTGCAC CACACACGCT CACCAGAAAT 600
51 TGTGCAAACT GAAGACAAA CTGTTTCTT CATCTGTGAC TCCTGTCTCT AAAATGTTGT 660

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Seq ID NO: 606 Protein sequence
Protein Accession #: NP_000720.1

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1 MNSGVCLCVL MAVLAAGALT QVPPADPAG SGLQRAEBAP RRQLRVBQRT DGESEAHLGA 60
11 LLARYIQQAR KAPSGRMSTV KHLQNLDFSH RISDRYMGW MDFRRSARE YEYPS

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Seq ID NO: 607 DNA sequence
Nucleic Acid Accession #: NM_001423.1
Coding sequence: 219..692

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1 AGCACTCTCC AGCCTCTCAC CGCAAAATTA CACACCCAGC TACACCAGCA GAGGAAACTT 60
11 ATAACCTCGG GAGGCGGGTC CTTCCTCTCA GTGCGGTCCAC ATACTTCCAG AAGAGCGGAC 120
21 CAGGGCTGCT GCAGCAGACT GCCACTCAGA GCGCCTCTGT OGCIGGGACC CTTCAGAACT 180
31 CTCTTTGCTC ACAAGTTACC AAAAAAATAA GAGCCACAT GTTGGTATTG CTGGCTGGTA 240
41 TCTTTGAGGT CCACATGCTC ACTGTTATTA TGCTATTGTT TAGCAACATT GCCAATGTCT 300
51 GGTGTGTTTC CAATACGGTA GATGCTCAG TAGGTCTTTG GAAAACTGT ACCAACATTA 360
11 GCTGCAGTGA CAGCCTGTCA TATGCCAGTG AAGATGCCCT CAAGACAGTG CAGGCCTTCA 420
21 TGATTCTCTC TATCATCTTC TGTGTCATTG CCTCCCTGGT CTTCGTGTTT CAGCTCTTCA 480
31 CCATGGAGAA GGGAAACCGG TTCTTCCCTT CAGGGGCCAC CACACTGGTG TGCTGGCTGT 540
41 GCATCTCTGT GGGGTGTGTC ATCTACACTA GTCATTATGC GAATGTGAT GGAACGCTGT 600
51 ATCACCAGCG CTATTCTTAC ATCTTGGGCT GATCTGCTT CTGCTTCAGC TTCATCATCG 660
11 GCGTCTCTTA TCTGTCTCTG AGAAAGAAAT AAGGCGGGAC GAGTTCATGG GGATCTGGGG 720
21 GGTGGGGAGG ASGAAGCCGT TGAATCTGGG AGGGAAGTGG AAGTTGCTGT ACAGGAAAAA 780
31 CCGAGATAGG GAGGCGGGGA GGGGGAAGCA AAGGGGGGAG GTCAATTCCT AAACCATTAC 840
41 TGAGGGGATT CTCTACTGCC AAGCCCTGCG CCTGGGGAGA AAGTAGTTGG CTAGTACTTT 900
51 GATGCTCCCT TGATGGGCTC CAGAGAGGCT CCTGCGAGCC ACCGAGCTTG GCTCCAGCT 960
11 GTTCTTAGTG ACACACACTG TCTGGGGGCC CATCAGCTGC CACAACACCA GCGCCACTTC 1020
21 TGGTCTATGC ACGAAGACCT ACAGACCTAC TGCACTGAGT TAAATAGCG GTACAAAGTC 1080
31 TGGCAAGAGC AGTACTGTCT TTTGTGCTCA ATACGCTAAG CCTGGAGGCC ATCCTGCCCT 1140
41 TCTGACCAAA GCGAACCACT CACATTCCAG TCTGAAGTGC CTACTGGGGG GCTTTGGCCT 1200
51 GTGAGCCATT GTCCCTCTTT GGAACAGATA TTTAGCTCTG TGGAAITCAG TGACAAAATG 1260
11 GGAGAGAGAA AGAGAGTTTG TAAGTCTATG CTGTGGGGTT AGCTAATCCA AGAAGGAGAC 1320
21 CTTTTCACAA TCGAAGACCT GGGGATGCT CAGAGCCGAG TCGAGACCTC ACACACGGCT 1380
31 GTCCCTCATG GAGACCTCAT GCCATGGTCT TTGCTAGGCC TCTGTCTGAA AGCCAGGGCA 1440
41 GCTCTTCTGG AGTTCTCTCA AAGTCACTAG TGAACAATTC GGTGGTAAAA GTACCAACA 1500
51 AACTATGGGA TCCAGGGGGC AGTCTTGCAA CAGTGCCATG TTAGGGTTAT GTTTTATAGG 1560
11 TTCCCTCAA TGCAGTCAGT GTTCTTTTAA AGTATACAAC AGGAGAGAGA TGGACATGGC 1620
21 TCATTGTAGC ACATCTCTAT TACTCTTCTT CTAACTTTT TGAGGAAGTT TTGTCTAATT 1680
31 ATCAATATTG AGGATCAGGG CTCTTAGGCT CAGTGGTAGC TCTGGCTTAG ACACCACTGT 1740
41 GAGTATACAC CTCTTGGGGA CCCTGCCTAT CCCACTTAC AGGTGAGGCA TGGCAATTCT 1800

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GGAAGCTGAT TAAACACAC ATAAACCAA ACCAAACAAC AGGCCCTTGG GTGAAAGGTG 1860
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TCTTTCTTT AAAATAAAAA AGCAAAACT CTGTGTGTAC CTAGTCAGAT GGTAGACGAG 2040
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TCCTTTTGG GGAATGTTA TGCCATGATT TTGTGTATT ATGTAAGAG ATTATTACTA 2340
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CTAGGCTGAG GTTAGAGAGA TTGCCAGCA AAAACTGTGG GAAGATGAAC TTGTCTATTA 2460
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CAGACATATC CAAGGGGAA ACTCAGATT TGTTAAGAAG TTGAATATG ACTGGAGTAA 2580
ACCTGTATT CCCTATCTT TACTTTTTT TCTGTGACAT TTATGTCTCA TGTAAATTCG 2640
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TTCTGATTCC CTCAAAAAA AAAAA

Seq ID NO: 608 Protein sequence

Protein Accession #: NP_001414.1

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LKTVAQFMIL SIIPCVIALI VVFQLETFME KGNRFPLSGA TILVCNLCIL VGVSIYTSY 120
ANRDGTQYHH GYSYLLGWIC PCFSPFIIGVL YLVLRKK

Seq ID NO: 609 DNA sequence

Nucleic Acid Accession #: NM_004961.2

Coding sequence: 55..1575

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TCCAAAGTTC TTCAGTCCCT OCTAGGCATC TTATTGATCC TCCAGTCGAG GGTGAGGGA 120
CCTCAGACTG AATCAAGAA TGAAGCCTCT TCCCTGTATG TTGCTATGG CCCCCAGCCC 180
CAGCCCTCTG AAAATCAGCT CCTCTCTGAG GAAACAAAGT CAACTAGAGC TGAGACTGGG 240
AGCAGAGTTG GCAAACTGCC AGAAGCCTCT CGCATCCTGA ACACATCTCT GAGTANTTAT 300
GACCAACAAAC TGCGCCCTGG CATTTGGAGAG AAGCCCACTG TGCTCAGTGT TGAGATCGCC 360
GTCAACAGCC TTGGTCTCTT CTCTATCCTA GACATGGAAT ACACCATTTGA CATCATCTTC 420
TCCCAAGACT GGTACGAGCA ACGCTCTGT TACAACGACA CCTTTGAGTC TCTGTCTCG 480
AATGGCAATG TGGTGGGCA GCTATGGATC CCGGACACCT TTTTATGGA TCTTAAGAGG 540
ACCCAGAGGC ATGAGATCAC CATGCCAAC CAGATGGTCC GCATCTACAA GATGGCAAG 600
GTGTTGTACA CAATTAGGAT GACCAATTGAT GCCGGATGCT CACTCCACAT GCTCAGATT 660
CCAAATGGAAT CTCACCTTG CCCCTATCTT TTCTCTAGCT TTCTCTATCC TGAGAATGAG 720
ATGATCTACA AGTGGGAAAA TTTCAGCTT GAAATCAATG AGAAGAACTC CTGGAAGCTC 780
TTCCAGTTTG ATTTTACAGG AGTGAGCAAC AAAACTGAAA TAATCACAA CCAAGTTGGT 840
GACTTCATGG TCAATGAGAT TTTCTTCAAT GTGAGCAGGC GGTTTGGCTA TGTGCTCTT 900
CAAACTATG TCCCTTCTTC CGTGACCAAG ATGCTCTCTT GGGTTTCTT TTGGATCAAG 960
ACAGAGTCTG CTCGCGCGG GACCTCTCTA GGGATCAACT CTGTTCTGAC CATGACCAAG 1020
TTGGGCACTT TTCTCTGTA GAAATTCCTG CGTGTCTCTT ATATCACAGC CTGGGATTT 1080
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AAGCTGACCT CGTGTGAGTG GTGCAAGGCT TTTAAGAAGT ACTTCTGCAT GGTCCCGAT 1440
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CTCCCTTACC TGGCCCATTC ACTGAGTCTT CTCAGCAGAC CATTTCAAT TATTAATAAA 1800
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ACTTAGTAT CAGCTCCCTA AAACCATGCC TAGTACAGG CGGATTAGCT ATCTTCCAAC 1920
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TCAGATTATT ATGTTCTCAG TTCTCTCTCC CTGCTACCCC TTTCTCTGCA GATAGATAGA 2160
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Seq ID NO: 610 Protein sequence
Protein Accession #: NP_004952.1

1 11 21 31 41 51
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10 MLKVLVLL GILLILQSRV BGPQTESKNE AS9RDVVYGP QPQPLENQLL SEETKSTETE 60
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IFSQIWDYDER LCYNDTFESL VINGNVVSQL WIPDTFFRNS KRTHEHEITM FNQMVRIYKD 180
GKVLVYTRMT IDAGCSLHML RFPMDSHSCP LSFSSFSYPE NEMIYKMFNF KLEINBKNSW 240
KLFQDFDTGV SNKTEIITTP VGDFMVTIF FNVSRFRGVV AFQNVVPSSV TMLSNVSPW 300
15 IKTESAPART SLGITSVLTM TILGTFSRKN FPRVSYITAL DFYIAICFVF CFCALLEFAV 360
LNFLIYNQTK AHASPKLRHP RINSRAHART RARSRACARQ HQEAFVCOIV TTEGSDGEER 420
PSCSAQQPPS PGPSPGPRSL CSKLACCENC KRFKKYFCMV PDCEGSTWQQ GRLCIHVYRL 480
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Seq ID NO: 611 DNA sequence
Nucleic Acid Accession #: NM_021984.1
Coding sequence: 572..1753

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30 CACTGCCCTCC CAGCAAGGC AGCACTATCC GGACTTCTAA CACCNTCGGG TCGAGGGACC 300
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40 AATGGATTCT CACTCTGOC CTCTATCTT CTCTAGCTT TCCTATCCG AGAATGAGAT 900
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70 TTTCCCAAGT ACTTCCCTA GGCCTBACCC AGGCACTAGG CCTGCTGAC TTCTGGGGC 2640
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75 GTCACAGATT TCTGTGGAC TGTGATCTC ACTGGAAGCT ATCCAAGAGC CCAGTGTAC 3000
CTTCTAGACC ACATGATAG GCTAGACRGC TCAATTCTC ATGATTCTCT TCTGTACCT 3060
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CCTGAGTGGC TCAGACTGCC CCAAGATCA AATCTCTCT GGTGTAGTA ACCAGTGGG 3180
ATGAATTTGG ACTAGCCCCA ATGCTTCTAT ATGCTAAGTG AAATCTGTGT CTGTAATTG 3240
80 TTGGGGGGTG GATAGGGTGG GGTCTCCATC TACTTTTGTG CACCATCATC TGAATGGGG 3300
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Seq ID NO: 612 Protein sequence
Protein Accession #: NP_068819.1

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5 MVRYYKDGKV LYTIRMTIDA GCSLHMLRFP MDSHSCPLSF SSFSYPENEM LYKWNFKLE 120
INERKNSMLF QLOFTGVSNK TELIITPVGD FMVMTIFPNV SRRFGYVAFQ NYVPSSVTM 180
LSWVSFWIKT ESSAPARTSLG ITSVLMTMTL GTFSRKNFPR VSYITALDFY IALCFVFCFC 240
ALLEFAVLNF LIYNQTKAHA SPKLRRPRIN SRAHARTRAR SRACARQHOE APVCQIVTTE 300
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CIHVYRLDNY SRVVFVPTFF PFNVLYWLVC LNL

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Seq ID NO: 613 DNA sequence
Nucleic Acid Accession #: NM_021987.1
Coding sequence: 572..1657

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GTGTAAAGAA AGCCAAATCA AGGACCCGAA TGTGAGCAGG ACCTCAGAA GCGCCCTTGT 240
CACTGCCCTCC CAGCAAAAGGC AGCACTATCC GGACTTCTAA CACCATCGGG TCGAGGGACC 300
TCAGACTGAA TCAAGAATAG AAGCCCTCTC CCGTGTATGT GTCTATGGCC CCCAGCCCCA 360
GCCTCTGGAA AATCAGCTCC TCTCTGAGGA AACAAAGTCA ACTGABACTG AGACTGGGAG 420
CAGAGTTGGC AAGCTGCTCG AAGCCTCTCG CATCCTGAAC ACTATCCTGA GTAATTATGA 480
CCACAAATCG CGCCCTGGCA TTGGAGAGAA GCCCACTGTG GTCACTGTG AGATCTCCGT 540
CAACAGCCCT GGCTCTCTCT CTATCCTAGA CATGGAATAC ACCATTGACA TCATCTCTC 600
CCAGACCTGG AATTCTAAGA GGACCCACGA GCATGAGATC ACCATGCCCA ACCAGATGTT 660
CCGCATCTAC AAGGATGGCA AGGTGTGTGA CACAATTAGG ATGACCATG ATGCCGATG 720
CTCACTCCAC ATGCTGACAT TTCCAATGGA TCTCACTCT TGCCCTCTAT CTTTCTCTAG 780
CTTTTCCAT CCGTGAATG AGATGATCTA CAAGTGGGAA AATTTCAGC TTGAAATCAA 840
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AATAATCACA ACCCAAGTGT GTGACTTCAT GGTGATGAGC ATTTTCTTCA ATGTGAGCAG 960
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CTGGGTTTCC TTITGGATCA AGACAGAGTC TGCTCCAGCC CGGACCTCTC TAGGGATCAC 1080
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CAATGTGCTC TACTGGCTTG TTGCGCTTAA CTGTGAGTGA CCACTGCTTA CCGTGTGGGG 1680
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CAGCAGCAGC AGGAGCAGCT AGAGTTTTC CTGCCCCATT CCCCACACAG AAGCTTGCAG 1800
AGGGTTTGT TTTGCTGCCC CTCTCCCTTA CCTGGCCCAT TCACTGAGTT TCTCTGAGC 1860
ACCAITTCAG ATTATTARTA AATGGGCCAC CTTCTCTTTC TTCAAGGAGC ATCCGTGATG 1920
CTCAGTGTTC AAAACACAG CCACTTATG ATCAGCTCCC TAAACCATG CCTAAGTACA 1980
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ACCATGATC TCTCTGTCA CCTCTGCTGG CACACAGTGG GCAAGGCCCA GAATGGCGAC 3000
CTCTCTTAG CTCAATTTCT GGGCCGAGG TGCTCAGACT GCCCCCAAGA TCAATCTCT 3060
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GTGAAATCTG TGTCTGTAAT TTGTTGGGGG GTGGATAGGG TGGGCTCTCC ATCTACTTTT 3180
TGTACCATC ATCTGAATG GGGAAATATG TAAATAARTA TATCAGCAA GC

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Seq ID NO: 614 Protein sequence
Protein Accession #: NP_068822.1

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VMTIFPNVSR RFGYVAFQNY VPSSVTMLSL WVSFWIKTES APARTSLGLT SVLMTTLGT 180
FSKKNFPKRV YITALDFYIA ICFVFCFAL LKFAVLNPLI YNQTKAHASP KLRRPRINSR 240
AHARTRARSR ACARQHQBAP VCQIVITEGS DGEERPSCSA QPPSPGSPB GPRSLCSKLA 300
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Seq ID NO: 615 DNA sequence
Nucleic Acid Accession #: NM_021990.1
Coding sequence: 1309..2490

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10	CAGAGAAAGT	CTCAAATCAT	AGTGTATCAG	CTGATGAGTT	GTCAAAAAAT	GACACACGCG	180
	GTGTAAAGAA	AGCCAAATCA	AGGACCCGAA	TGTGAGCAGG	ACCTCAGAA	CCCCCTTTGT	240
	CAGTCCCTCC	CAGCAAAAGC	AGCACTATCC	GGACTTCTAA	CACCATCBGT	GAGTTTCATA	300
	CCCTGGCAGA	TGGCCTTTAA	CATTTTGTGT	TAATTCAATT	ATCTTACTA	ATCTTCTTCT	360
	TTTCTTTGGC	TGTGGTGCAT	GCTGTGTGAG	CTCAGGCTGG	ACTCCTGTTC	GGCAGCCAGT	420
15	TCCTGGATGG	CTGTCTGTGG	GTGGAGGACT	CCTGCCCTTC	CTGTTTACAC	ACCCACAAAG	480
	GCTGCTCTTT	AGCCCTCCTTC	CCTTCATCCC	CTTCCCTGCG	CCCCAGTCCA	ACGAGTATTA	540
	CACAAACCAAC	AAAAACGCAA	AATATTCCCA	CAATTTTCTG	GTCTCTCTCG	GGAGAGGCCG	600
	CTCTGGCTTT	TCTCTCAGC	CCTGCCCCCT	TGCTCTCTCC	TCACTCTCTG	TTGGTGTCTG	660
	TCAGGCTGAC	TAGAGGCCAA	GGCGACCAAC	ACTAGGCAAA	CGCGGCCAGC	GCTCAGACAT	720
20	AAATGCCCTC	TTCAATTCAC	GTGTAAACAT	CTTTTAAAT	CTAGTCTCTG	GTTTTGTGTA	780
	TTTCTTCTTA	AATAAAAGAG	TGATCATAAA	AGAGGGACAG	CATAGAAAGT	CCCCAAAGAG	840
	CAGCAAGGTT	CAGCAAAAGC	AATCTGTGAC	TGTCTTATAA	TTTGTCTATTA		900
	CCAGTCACTA	TTTAATAGG	TTTGTGTGTT	AAAACTGTGT	TTGGTTTGCT	TCTGTCCCAA	960
	GAGGCACTAG	CTGGGGCCCC	TACAGAGTGC	AGGGCAGAGC	TTCAATTTTC	GTTTGAATGT	1020
25	TCTAGGGTCG	AGGGACCTCA	GACTGAATCA	AAGAATGAAG	CCTCTTCCCG	TGATGTTGTC	1080
	TATGGCCCCC	AGCCCCAGCC	TCTGGAAAT	CAGCTCCTCT	CTAGGAAAC	AAAGTCAACT	1140
	GAGACTGAGA	CTGGGAGCAG	AGTTGSCAAA	CTGCCAGAG	CCTCTCGCAT	CTGTAACACT	1200
	ATCCTGAGTA	ATTATGACCA	CAAACTGCGC	CCTGGCATTG	GAGAGAAGCC	CAGTGTGGTC	1260
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35	TATCCTGAGA	ATGAGATGAT	CTACAAGTGG	GAAAAATTCA	AGCTTGAAAT	CAATGAGAAG	1680
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40	CTGACCATGA	CCACGTTGGG	CACCTTTTCT	CGTAAGAATT	TCCCGCGTGT	CTCCTATATC	1980
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	CGCCATCCTC	GTATCAATAG	CCGTGCCCAT	GGCCGATACC	GTGACAGTTC	CCGAGCCTGT	2160
	GGCCGCCAAC	ATCAGGAAGC	TTTGTGTGTC	CAGATTGTCA	CCACTGAGGG	AAATGATGGA	2220
45	GAGGAGGCCC	CGTCTTGCTC	AGCCGAGCAG	CCCTCTAGCC	CAGGTAGCCC	TGAGGGTCCC	2280
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	INENKSKLFP	QDFITGVSNK	TEIITTFVGD	FMVMTIFENV	SRREGYVAFQ	NYVPSSVTMM	180
	LSWVSFNLKT	ESAPARTSLG	ITSVLTMTTL	GTFSRKNPFR	VSYITALDFY	IAICFVPCFC	240

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 CINHVLNDNY SRVVFPVTFP FPNVLYNLVC LNL

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Seq ID NO: 617 DNA sequence
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 30 TTATTATTTA TTATTATTAT GGGGTGACCT TCTTGGGAC TCGGGGGCTG GTCTGATGGA 1140
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 Protein Accession #: NP_004855.1

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 40 EQLLTLRLAN QSWEDSNIDL VPAPAVRIIT PEVRLGSGGH LHLRISRAAL PEGLEPASRL 120
 HRALPHLSPT ASRSWDVTRP LRRQLSLARP QAPALHLRLS PPPSQSDQLL AESSSARPOL 180
 EHLRLPQAAH GRRRARARNG DDCPLGPGRC CRLETVRASL EDLGWADNVL SPREVQVTCM 240
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 LAKDCHCI

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Seq ID NO: 619 DNA sequence
 Nucleic Acid Accession #: NM_003979.2
 Coding sequence: 254..1357

50 1 11 21 31 41 51
 ATAAACGAT GAAGTGCCTT GGAAGTGGAA TAGGGGTGTC CTCCTCCCTG ACCCTCCCCC 60
 TCCTTGTCCC TCTGCTCACC CCTGCTCCTT TCCCTCCCTC CGGCGAGGCG CGCCTTTATA 120
 ACACCTGCTC AGATGTCGAG GGCGGGATAG CTGTCCAAAG TCTCCCCAG CACTGAGGAG 180
 55 CTGCGCTGCT GCCCTCTTGC GCGCGGGAAG CAGCACCAAG TTCCACGGCA ACCCCTTGGC 240
 ACTAGGGTCC AGATTGGCTA CAACAGTCCC TGATGGTTGC CGCAATGGCC TGAATCCAA 300
 GTACTACAGA CTTGTGATA AGGCTGAAGC TTGGGGCATC GTCTTAGAAA AGGTGGCCAC 360
 AGCCGGGGTT GTGACCTCGG TGGCCTTCAT GCTCACTCTC CGATCTCTCG TCTGCAAGGT 420
 GCAGGACTCC AACAGGCGAA AAATGCTGCC TACTCAGTTT CTCTTCTCTC TGGGTGTGTT 480
 60 GGGCATCTTT GGCTTCACTT TGGCCTTCAT CATGGGACTG GAAGGGAGCA CAGGGCCAC 540
 ACCTTCTTTC CTCTTGGGA TCCCTCTTTC CATCTGCTTC TCCCTCTCTC TGGCTCATGC 600
 TGTCACTCTG ACCAAGCTCG TCCGGGGGAG GAAGCCCTTT TCCCTGTGTT TGAATCTGGG 660
 TCTGGCCGTG GGCCTCAGCC TAGTCCAGGA TGTATTCGCT ATTGAATATA TTGTCTGAC 720
 CATGAATAGG ACCAAGCTCA ATGTCTTTTC TGAGCTTTCC GCTCTCTGTC GCAATGAAGA 780
 65 CTTTGTCTTC CTGCTCACCCT ACGTCTCTTT CTGTATGGCG CTGACCTTCC TCATGTCTTC 840
 CTTCACCTTC TGTGTTCTCT TCAAGGGCTG GAAGAGACAT GGGGCCACCA TCTACCTCAT 900
 GATGCTCTTC TCCATTGCCA TCTGGGTGGC CTGGATCACC CTGCTCATGC TTCTGACTT 960
 TGACCGCAGG TGGATGACA CCATCTCTAG CTCCGCTTGG GCTGCCAATG GCTGGGTGTT 1020
 CTTGTGCTCT TATGTGTAGT CCGAGTTTTC GCTGCTCACA AAGCAACGAA ACCCATGGA 1080
 70 TTATCTCTGT GAGGATGCTT TCTGTAAACC TCAACTCGTG AAGAAGAGCT ATGGTGTGGA 1140
 GAACAGAGCC TACTCTCAAG AGGAAATCAC TCAAGGTTT GAAGAGACAG GGGACACGCT 1200
 CTATGCCCCC TATTCCACAC ATTTTCACTT GCAGAACCAAG CCTCCCCAAA AGGAATTCTC 1260
 CATCCACCGG GCTTACGCTT GGCAGAGGCC TTACAAAGAC TATGAAGTAA AGAAGAGGG 1320
 CAGCTAACTC TGTCTGAAAG AGTGGGACAA ATGCAGCCGG GCGGCAGATC TAGCGGGAGC 1380
 75 TCAAGGGGAT GTGGGCGAAA TCTTGAGTCT TCTGAGAAAA CTGTACAAGA CACTACGGGA 1440
 ACAGTTTGCC TCCCTCCGAG CCTCAACCAAC AATTCTTCCA TGCTGGGGCT GATGTGGGCT 1500
 AGTAAGACTC CAGTCTTAG AGGGCTGTA GTATTTTTTT TTTTGTGCT CATCTTGGT 1560
 ATACTTCTTT TAAGTGGGAG TCTCAGGCAA CTCAGTTTGA GACCTTACT CTTTCTTTT 1620
 GTTTTGTGAA ACAGGATCTT GCTCTGTAC CAGGCTTGA GTGAGTGGT GCGATCACAG 1680
 80 CCCAGTGCAG CCTCGAACC CTGTGCTCAA GCAATCTCTC CATCTCCATC TCCCAAGTG 1740
 CTGGGATGAC AGGGGTGAGC CACAGCTCCC AGCCTAGGCC CTTAATCTTG CTGTATTATT 1800
 CCATGACTA AAGTCTGGT CATCTGAGCT CACGCTGGCT CACACAGCTC TAGGGGCTG 1860
 CTCTCTAAC TCACAGTGGG TTTGTGAGG CTCTGTGGCC CAGAGCAGAC CTGCATATCT 1920
 GAGCAAAAT AGCAAAAGCC TCTCTCAGCC CACTGGCTTG AATCTACACT GGAAGCCAAC 1980
 TTGCTGGCAC CCGGCTCTCC CAACCTCTCT TGCTGGGTA GGAGAGGCTA AAGATCACCC 2040

5
TAAATTACT CATCTCTCTA GTGCTGCTC ACATTGGGCC TCAGCAGCTC CCCAGCACCA 2100
ATTCACAGGT CACCCCTCTC TTCTTGCACT GTCCCAAAAC TTGCTGTCAA TTCCGAGATC 2160
TAATCTCCCC CTAGGCTCTG CCAGGAATTC TTTCAGACCT CACTAGCACA AGCCCCGTTG 2220
CTCCTTGTC GAGAAATTTG TAGATCATTC TCACTTCAAA TTCTCGGGG TGATACCTTC 2280
CTCATCTTGC ACCCAACCT CTGAAATAG ATTTACCGCA TTACCGGCTG CATCTCTGTA 2340
GTGGGCATGG TCTCTAATG GAGGAGTGT CATTGTATAA TAAGTTATTC ACCTGAGTAT 2400
GCAATAAAGA TGTGTTGGCC ACTCTTTTCA TGTGTTGGCA GCAAAAAAAA AAAAAA

10
Seq ID NO: 620 Protein sequence
Protein Accession #: NP_003970.1

15
1 11 21 31 41 51
MATTVPDGR NGLSKYYRL CDKABAWGIV LETVATAGVV TSVAFMLTLP ILVCKVQDSN 60
RKMLPQFL FLGLVLGIFG LTFAPILGLD GSTGPTRFFL EGILFSICFS CLLAHAVSLT 120
KLVRGRKPLS LLVLGLAVG FSLVQDVIAI EYIVLTMNRT NVNVFSELSA PRNEDFVLL 180
LTYVLFMAL TFLMSSFTFC GSFTGWRHG AHYILMLLS LAIWVANITL LMLPFDLRRW 240
DNTILSSALA ANGVVFLAY VSPFLLLT QRNPMYDYPVE DAFCKPQLVK KSYGVENRAY 300
SQEETQGE EIGDTLYAPY STHFLQNPQ PKEFSIPRA HAWPSPKDY EVKKEGS

20
Seq ID NO: 621 DNA sequence
Nucleic Acid Accession #: NM_002423.2
Coding sequence: 48..851

25
1 11 21 31 41 51
ACCAAATCAA CCATAGGTCC AAGAACAAT GTCTCTGGAC GGCAGCTATG CGACTCACCG 60
TGCTGTGTGC TGTGTGCTCG CTGCCTGGCA GCTTGGCCCT GCCTGTGCTT CAGGAGGCGG 120
GAGGCATGAG TGATCTACAG TGGGAACAGG CTCAGGACTA TCTCAAGAGA TTTTATCTCT 180
ATGACTCAGA ACAAATAAT GCCAACAGTT TAGAAGCCAA ACTCAAGGAG ATGCAAAAAT 240
TCCTTGGCCT ACCATAACT GGAATGTATA ACTCCCGCT CATAGAAATA ATGCAGAAGC 300
CCAGATGTGG AGTGCCAGAT GTTGCAAGAT ACTCACTATT TCCAAATAGC CCAAAATGGA 360
CTTCCAAAGT GGTCACTTAC AGGATCGTAT CATATACTCG AGACTTACCG CATATTACAG 420
TGGATCGATT AGTGTCAAAG GCTTTAAACA TGTGGGGCAA AGAGATCCCG CTGCATTTC 480
35 GGAAGTTGT ATGGGGAAT CGTGACATCA TGATTGGCTT TGGCGAGGGA GCTCATGGGG 540
ACTCTACCC TTTGATGGG CAGGAAACA CGCTGGCTCA TGCCTTTGCG CTTGGGACAG 600
GTCTCGGAGG AGATGCTCAC TTGATGAGG ATGAACGCTG GACGGATGGT AGCAGTCTAG 660
GGATTAACTT CTTGTATGCT GCACTCATG AACTTGGCCA TTCTTTGGGT ATGGGACATT 720
40 CCTCTGATCC TAATGCATG ATGTATCCAA CCTATGGAAA TGGAGATCCC CAAAATTTTA 780
AACTTTCCCA GGAATGATAT AAGGCAATC AGAACTATA TGGAAAGAGA AGTAATTCAT 840
GAAAGAAATA GAACCTTCAG GCAGAACATC CATTCAATCA TTCAATGGAT TGTATATCAT 900
TGTGACCAA TCAGAAATGA TAAGCACTGT TCCTCCACTC CATTTAGCAA TTATGTCACC 960
CTTTTTTAT GCAGTTGGTT TTTGAATGTC TTTCACCTCT TTTATTGGTT AAACCTCTTT 1020
45 ATGGTGTGAC TGTGTCTTAT TCCATCTATG AGCTTTGTCA GTGCGCTAG ATGTCAATAA 1080
ATGTTACATA CACAATAA TAAATGTTT ATTCATGGT AAATTA

Seq ID NO: 622 Protein sequence
Protein Accession #: NP_002414.1

50
1 11 21 31 41 51
MRITVLCAVC LIPGSLALPL PQEAGGMSL QWBDQDYLK RPYLYDSETK NANSLEAKLK 60
EMQFFGLPT TMLMSRVLE IMQKPRGVP DVAEYSLFPN SPKWTISKVVT YRIVSYTRDL 120
PHITVDRLVS KALNMWKEI PLHFRKVVWG TADIMIGFAR GAHGDSYFDP GPENTLAHAF 180
55 APGTGLGGDA HFDEDERWTD GSSLGINFLY AATHLGHSL GMHSSDPFNA VMYPTYGNED 240
PQNFRLQDD IKGIQKLYGK RSNBKK

60
Seq ID NO: 623 DNA sequence
Nucleic Acid Accession #: NM_031457.1
Coding sequence: 204..956

65
1 11 21 31 41 51
AAACAGGAAA TAAATACGAA TGAACCTGAG CTCTAAGCAG CATGTAACCT GGCCTGCATC 60
CAGGAATAG AGGACTTCGG ATCCTTCFAA CCGTACCAAC CAACTGGCCC CAGTACATTC 120
ATTCTCTCAG GAAAAAAGC AAGGTCCCA CAGCAAGAA AAGGAATAG ATCAAGAGAT 180
AAGTGGCTGC TGGCAGAGCA AGCATGAAT CGATGACTTC AGCAGTTCCG GTGGCCAAAT 240
CTGTGTGTGT GGTGGCACCC CACAATGGTT ATCCTGTGAC CCCAGGAAT ATGTCTCAAG 300
TGCCTCTGTA TCCAAACAGC CAGCCGCAAG TCCACCTAGT TCCTTGGGAC CCACTAGTT 360
70 TGGTGTGAAA TGTGAATGGG CAGCCTGTGC AGAAAGCTCT GAAAGAAGGC AAAACCTTGG 420
GGGCCATCCA GATCATCAT GGCCTGGCTC ACATCGGCT CGGCTCCATC ATGGCGACGG 480
TTCTGTAGG GGAATACCTG TCTATTTCAT TCTAAGGAG CTTTCCCTTC TGGGGAGGCT 540
TGTGTTTAT CATTTCAGGA TCTCTCTCCG TGGCAGCAGA AAATCAGCCA TATTCTTATT 600
75 GCCTGCTGTC TGGCAGTTTG GGCCTGAACA TGGTCACTGC AATCTGCTCT CGAGTTGGAG 660
TCATACTCTT CATCAGAGAT CTAAGTATTC CCCACCCATA TGGCTACCCC GACTATTATC 720
CTTACGCTCG GGTGTGTAAG CCTGGAATGG CGATTCTGG CGTGTGCTG GTCTTCTGCC 780
TCTTGAAGTT TGGCATCGCA TGGCATCTT CCCACTTGG CTGCCAGTGG GTCTGCTGTC 840
AATCAAGCAA TGTAGTGTG ATCTATCCAA ACATCTATGC AGCAAAACCA GTGATCACCC 900
80 CAGAACCGGT GACCTCACA CCAAGTTATT CCAATGAGAT CCAAGCAAT AAGTAAGGCT 960
ACAGATCTG GAAGCATCTT TCACTGGGAC CAAAGAAAGT CCTCTCCCT TTCTGGGCTT 1020
CCATAACCCA GTCTGTCTCT GTCTGACAG CTGAGGAAC GTCTCTCCA CTGTTTGTAC 1080
TCTCACTTTC ATTCTTCAAT TCACTTAGG AAACCATGCT GTTCTCTAT CAAGAAGAAG 1140
ACAGAGATT TAAACAGATG TTAACCAAGA GGGACTCCCT AGGGCAGATG CATCAGACA 1200
TATGTGGCA TCCAGCTCT GGGGCTTGG CACACACACA TTGTTGTCT CTGCTGCATG 1260

TGAGCTTGTG GGTAGAGGA ACAAATATCT AGACATTCAA TCTCACTCT TCAATTGTG 1320
CATTCAITTA ATAAATAGAT ACTGAGCATT CAAAAA AAAA

Seq ID NO: 624 Protein sequence
Protein Accession #: NP_113645.1

1 11 21 31 41 51
MNSMTSAVPV ANSVLVVAPH NGYPVTPGIM SEVPLYPNQ PQVHLVPGNP PSLVSNVNGQ 60
PVQKALKEGK TLGAIQIIIG LAHIGLGSIM ATVLVGEYLS ISFYGGPEFN GGLWFIISGS 120
LSVAAENQPY SYCLSSSLG LNIWSAICSA VGVILFIDL SIPHYAYPD YYPYANGVNP 180
GMAISGVLLV FCLLEFGIAC ASSHFGQLV CQSSNVSVI YPNIYAANPV ITPEPVTSP 240
SYSSSIQANK

Seq ID NO: 625 DNA sequence
Nucleic Acid Accession #: NM_085221.3
Coding sequence: 1..870

1 11 21 31 41 51
ATGACAGGAG TGTITGACAG AAGGGTCCCC AGCATCCGAT CCGGCGACTT CCAAGCTCCG 60
TTCCAGACGT CCGCAGCTAT GCACCATCCG TCTCAGGAAT GCGCACTTT GCCCGAGTCT 120
TCAGCTACCG ATTCTGACTA CTACAGCCCT ACGGGGGGAG CCCGCGACCG CTACTGCTCT 180
CCTACTCCG CTCTCTATGG CAAAGCTCTC AACCCCTACC AGTATCAGTA TCACGGCGTG 240
AACGGCTCCG CCGCGAGCTA CCCAGCCAAA GCTTATGCGG ACTATAGCTA CGCTAGCTCC 300
TACCAACAGT ACGCGGGGCG CTACAACCGC GTCCCAAGCG CCACCAACCA GCCAGAGAAA 360
GAAGTGACCG AGCCCGAGGT GAGAATGGTG AATGGCAAAC CAAAGAAAGT TCGTAAACCC 420
AGGACTATT ATTCCAGCTT TCAGCTGGCC GCATTACAGA GAAGGTTTCA GAAGACTCAG 480
TACCTGCGCT TGCGGAGACG CGCCGAGCTG GCGCCCTCGC TGGGATTGAC ACAACACAG 540
GTGAAATCT GGTTCAGAAA CAAAGATCC AAGATCAGA AGATCATGAA AAACGGGGAG 600
ATGCCCGCG AGCAGCTCC CAGCTCCAGC GACCCAATGG CGTGTAACCT CCGCAGTCT 660
CCAGCGGTGT GGGAGCCCCA GGGCTCGTCC CGCTCGCTCA GCCACCACCC TCATGCCAC 720
CCTCGACCT CCAACAGTCC CCGAGCGTCC AGCTACCTGG AGAAGTCTGC ATCTGGTAC 780
ACAAGTGCAG CCAGCTCAAT CAATCCCAC CTGCCGCCCG CCGGCTCCTT ACAGCACCCG 840
CTGGCGCTGG CCTCGGGAC ACTCTATTAG

Seq ID NO: 626 Protein sequence
Protein Accession #: NP_055212.1

1 11 21 31 41 51
MTGVFDRRVP SIRSGDFQAP FQTSAAHHP SQBSPTLPES SAITDSDYVSP TGGAPRGYCS 60
PTSASYGKAL NPYQYQYHGV NGSAGSYPAK AYADYSYASS YHQYGGAYNR VPSATNPPEK 120
EVTPEVRMV NGKPKKVRKP RTIYSSFLA ALQRRFQRTQ YLALFERRAEI AASLGLTQTQ 180
VKIWFQKKS KKKLKKKKE MPPESSPSSS DPMACHSPQS PAVWERQSSS RSLSHHTFAH 240
PFTSNQSPAS SYLENSASWY TSAASSINSH LPPPGSLQHP LALASGTLT

Seq ID NO: 627 DNA sequence
Nucleic Acid Accession #: NM_014420
Coding sequence: 118..792

1 11 21 31 41 51
GCACGAGAGA CACGTGCTG AGCTGCCAGC TTAGTGGAAG CTCTGCTCTG GGTGGAGAGC 60
AGCCTCGCTT TGGTGACSCA CAGTGCTGGG ACCCTCCAGG AGCCCGGGGA TTGAAGGATG 120
GTGGCGGCGG TCTGCTGGG GCTGAGCTGG CTCTGCTCTC CCGTGGGAGC TCGGTCTCTG 180
GACTTCAACA ACATCAGGAG CTCTGCTGAC CTGCATGGGG CCGGAAGGG CTCACAGTGC 240
CTGTCTGACA CGGACTGCAA TACCAGAAAG TTCTGCTCC AGCCCGGCGA TGAGAGGCG 300
TTCTGTGCTA CATGTGCTGG GTTGCGGAGG AGGTGCCAGC GAGATGCCAT GTGCTGCCCT 360
GGGACACTCT GTGTGAACGA TTTTGTACT ACAGTGAAG ATGCAACCCC AATATTAGAA 420
AGGACACTTG ATGAGCAAGA TGGCACACAT GCAGAAGGAA CAACTGGGCA CCGACTCCAG 480
GAAACCAAC CCAAAAGGAA GCCAAGTATT AAGAAATCAC AAGGCAGGAA GGGACAGAG 540
GGAGAAAGT GTCTGAGAAC TTTTGACTGT GGCCCTGGAC TTGCTGTGC TCGTCATTTT 600
TGGACGAAA TTTGTAAGCC AGTCTTTTG GAGGACAGG TCTGCTCCAG AAGAGGGCAT 660
AAGACACTG CTCAGCTCC AGAAATCTTC CAGCGTTGCG ACTGTGGGCC TGGAAGTACT 720
TGTGGAAGCC AATTGACCAG CAATCGGCAG CATGCTCGAT TAAGAGTATG CCAAAAAATA 780
GAAAGCTAT AATATTTC AATAAAGAA GAATCCACAT TGCAAAAAAA AAAAAAAA 840
A

Seq ID NO: 628 Protein sequence
Protein Accession #: NP_055235

1 11 21 31 41 51
MVAARVLLGLS WLCSPLGALV LDFMIRBSA DLHGARKGSQ CLSDTDCNTR KFCLOPRDEK 60
PFCAICRGLR RRCQRDAMCC PGTLGVNDVC TTMDATPIL ERQLDEQGT HAEGTTHGPV 120
QENQPKRPS IKKSQGRKQ EGSCILRTFD CGPLCCARH FWTIKCKPVL LEGQVCBRG 180
HKDTAQAPRI PORCOCGPGI LCRSGLTSNR QHARLRVCQK IERL

Seq ID NO: 629 DNA sequence
Nucleic Acid Accession #: NM_002448.1
Coding sequence: 241..1134

1 11 21 31 41 51

Seq ID NO: 630 Protein sequence
Protein Accession #: NP_002439.1

Seq ID NO: 631 DNA sequence
Nucleic Acid Accession #: NM_002557.1
Coding sequence: 13..2049

	1	11	21	31	41	51	
50	CAGACCATTG	AGATGTGGAA	GCTGTTTGCTG	TGGGTTGGGC	TGGTCTCTGT	GCTGAACAC	60
	CACGATGGTG	CTGCCCATTA	ACTGCTGTGT	TATTTCACCA	ACTGGGCCCA	CAGTGGGCCA	120
	GGCCCTGCGT	CGATCTTGCC	CCATGACCTG	GACCCCTTTC	CTGCGACCCA	CCTGATATTT	180
	GCCTTTGGCT	CAATGAACAA	CAATCAGATT	GTTCCTAAGG	ATCTCCAGGA	TGAGAAAAAT	240
55	CTCTACCCAG	AGTTCAACAA	ACTAAAGGAG	AGGACACAG	AGCTGAAAC	ACTACTGTCC	300
	ATCGGGGGGT	GGAACTTTGG	CACTCAAGA	TTCACCATTA	TGTTGTCCAC	ATTTGGCCAC	360
	CGTGAAGAA	TTATTGCTTC	AGTATATATCC	CTTCAGAGGA	CACATGATT	TGATGGTCTT	420
	GACCTTTTCT	TCTTATATCC	TGGACTAAGA	GTCGACCCCA	TGCATGACC	GTGGACTTTT	480
60	CTCTTCTTAA	TTGAAGAGCT	CGCTTTTGCC	TTCCGGGAAG	AGGCACGTCT	CCACCTGGCG	540
	CCGAGGCTGC	GTGCTGTCTG	TGCTGTTTCT	GGGGTCCAC	ACATCGTCCA	AACATCTAT	600
	GATGTGGCT	TTCTAGGAAG	CTCTCTGAT	TTTCATCAAT	TCCTGTCTTA	TGACTACAT	660
	CGAAGTTCGG	AAAGGTTTCA	AGGACATAAT	AGCCCCCTCT	TCTCTCTGCC	TGAAGACCCC	720
65	AAATCTTCGG	CAATGCTATC	GAATTATTGG	AGAAAGCTTG	GGGCACCTCT	AGAGAAAGCTC	780
	ATATCTGGGA	TCCCCACTTA	TGGACGTACC	TTTGCCCTTC	TCAAAGCCTC	TAAAGATGGG	840
	TTGCAGGCCA	GAGCGATTGG	ACCAGCATCT	CCAGGGGAAT	ACACCAAGCA	ADAGAGGCTTC	900
	TTGGCTTATT	TGAGATTTTG	TTCCCTTTGT	TGGGGAGCCA	AGGAAGCTG	GATTGATTAC	960
70	CAGTATGTCC	CGTATGCCAA	CAAGGGGAAA	GAGTGGGTTG	GCTATACAAA	TGCCATCAGC	1020
	TTCACTTACA	AGGCATGGTT	TATAAGGCCA	GAGCATTTTG	GGGGGGCCAT	GGTGTTGGCA	1080
	TTGGACATGG	ATGACGTCAG	GGGCACTGTC	TGTGTCACTG	GCCCTTTCCC	CCCTGTCTAT	1140
	GTATTGAATG	ATATCCTGTG	GGCGGCTGAG	TTCACTTCAA	CTTCTTTPAC	ACAAATTTGG	1200
75	CTGTCAATCT	CTGTGAATTC	TTGAAAGCT	GACGCTGAAA	GCTGTGGCTG	GACCAACGGCA	1260
	TGGAAAGCTG	ATACTAAGAT	TTTGCCCCCA	GGAGGAGAGG	CTGGGGTCA	TGAGATCCAC	1320
	GGAAAGCTG	AAAAATATGC	TATAACCTCT	AGAGGTACAA	CTGTGACCCC	CACTAGAGAA	1380
	ACTGTATCCC	TGGGAAGCA	CACCTGAGCT	CTAGGAGAGA	AGACCTGAGAT	CTACTGGGGCA	1440
80	ATGACCATGA	CTTCTGTGGG	TCACTAGATC	ATGACCCCTG	GAGAGAAAGC	CTGACCCCTC	1500
	GTGGGTCTTC	AAATCTGTGAC	CACCTGAGCA	AAGAACCTGA	CTTCTGTGGG	TTATCAGTCT	1560
	GTGACCCCTG	GGGAAAAGAC	CCTGACCCCT	GTGGGTCTAT	AGTCTGTGAC	CCCTGTGAGT	1620
	CATCAGTCTG	TGAGCCCTGG	AGGAACGACT	ATGACCCCTG	TCCATTTTCA	GACTGAGACCT	1680
85	CTTAGACAGA	ATACAGTGGC	CCCTAGAGAG	AAGGCTGTGG	CCCTGTGAAA	GGTGACCTGT	1740
	CCCTCCAGAA	ACATTAATCAGT	CACCCCTGAA	GGGCACTACT	TGCTCTTTAG	AGGGGAGAAAT	1800
	TTGACTTCTG	AGGTGGGCACT	TCACCCGAGG	ATTGGTAAGT	TGGGTCTCTA	GTGAGAGACT	1860
	GAAACACAGA	TGATGCTGTG	CTTCCAGCTCT	GTCACTCCAG	TCCCGGAACA	AACCTCTCTA	1920
90	GCCTTTGACA	ACCCGCTTGT	TCCCATCTAT	GGAAACACT	CCCTCTGTCAA	CTTCACTAAC	1980
	CCCTAAACAA	GTGCTCTTTC	TCTAAAAAAA	GAAATCCAG	AAAACCTGCG	TGTGGTAGAA	2040
	GAGCGCTAAG	CCCCCTGTGG	CTGACAAAGC	AGGCAAAACC	CTTGTCTTTT	CTTCTAAGGT	2100
	ACATGTTTGA	AGCCTTCTCA	TCCCGGGGCA	AGGCAGGCAT	CAAAACACCA	ATAGAGCCAAAT	2160

CTCTTTTCCA TTAATAAAC TGTAACACA AGAACCCA

Seq ID NO: 632 Protein sequence
Protein Accession #: NP_002548.1

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1	11	21	31	41	51	
MWKLILWVGL	VLVLKHHGGA	AHKLVCYFTN	WAHSRPGPAS	ILPHDLDPFL	CTHLIFAFAS	60
MNNQIVAKD	LQDEKILYPE	FNKLKERNRE	LKTLISIGGW	NFGTSRFTIM	LSTFANREKP	120
IASVISLLRT	HDFDGLDLFP	LYPGLRGSPM	HDRTFLFLI	EELLFAPRKE	ALLTMRPRLL	180
LSAAVSGVPH	IVQTSYDVRE	LGRLLDFINV	LSYDLHGSE	RFTGHNSPLF	SLFEDPKSSA	240
YAMMYWRKLG	AFSEKLIMGI	PTYGRIFRLI	KASKNGLQAR	AIGPASPGKY	TKQSGFLAYF	300
EICSFVWGA	KHWIDYQYVF	YAMKSKWVVG	YDNAISPSYK	AWFIRREHFG	GAMVMTLDM	360
DVRGTFPGTG	PFPLVYVLND	ILVRAEFSGT	SLPQFWLSSA	VNSSSTDFER	LAVITAWTID	420
SKILPPGGGA	GVTEIHGKCE	NMTITPRGTT	VTPTKSTVSL	GKSTVALGEK	TEITGAMTMT	480
SVGHQSMTPG	EKALTVPVGHQ	SVTTGQKTLT	SVGYQSVTPG	EKTLTPVGHQ	SVTPVSEQSV	540
SPGGTTMTFV	HFQETETLRQ	TVAPRRKAVA	REKVTVPSPN	ISVTPGQTM	PLRGENTLSE	600
VGTHPRMGNL	GLQMEABNRM	MLSSSPVIQL	PEQTPLAFDN	RFVPIYGNES	SVNSVTPQTS	660
FLSLKKEIFE	NSAVDEEA					

Seq ID NO: 633 DNA sequence
Nucleic Acid Accession #: NM_003885.1
Coding sequence: 98..1021

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30
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1	11	21	31	41	51	
AAACTCAGAA	TTTTGCGGG	CTCGGTGAGC	GGTTTATACC	CTCCGCCCGG	CAGGCTGGGC	60
GCAGGGGGGG	AGCCCCCGCC	CGGCGCGCAG	CAGCACCATG	GGCACGGTGC	TGTCCCTGTC	120
TCCAGCTAC	CGGAAGGCCA	CGCTGTTTGA	GGATGGGCGC	GCCACGGTGG	GCCACTATAC	180
GGCCGTACAG	AACAGCAGAA	ACGCCAAGGA	CAAGAACCTG	AAGCGCCACT	CCATCATCTC	240
CGTGTGCTCT	TGGAAGAGAA	TGCTGGCCGT	GTGCGCCAG	AAGAAGAACT	CCAAGAAGGT	300
GCAGCCTAAC	AGCAGCTACC	AGAACAACAT	CACGCACCTC	AACAATGAGA	ACCTGAAGAA	360
GTGCTGTGCG	TGGGCCAACC	TGTCCACAT	CGCCAGCCCC	CCACCGGCC	AGCCGCCCTGC	420
ACCCCGCGCC	AGCCAGCTCT	CGGGTTCCCA	GACCGGGGGC	TGCTCCTCAG	TCAAGAAAGC	480
CCCTCACCTT	GCCGTCACTT	CCGCAGGGAC	GCCCAACCGG	GTCTCGTCC	AGCGGTCCAC	540
CAGTGAGCTG	CTTCGTGCTC	TGGGTGAGTT	TCTCTGCGCG	CGGTGCTACT	GCCTGAAGCA	600
CCTGTCCCCC	ACGGACCCCG	TGCTCTGGCT	GCGCAGCGTG	GACCGCTCGC	TGCTTCTGCA	660
GGGCTGGCAG	GACCAGGGCT	TGATCAGGCC	GGCCACAGTG	GTCTTCTCTT	ACATGCTCTG	720
CAGGGATGTT	ATCTCTCTCG	AGGTGGGCTC	GGATCAGGAG	CTCCAGGGCG	TCCGCTGAC	780
ATGCTGTAC	CTCTCTTACT	CCTACATGGG	CAAGAGATC	TCTACCCGCG	TCAAGCCCTT	840
CCTGGTGGAG	AGCTGCAAGG	AGGCTTTTGG	GGACCGTTGC	CTCTCTGTCA	TCAACCTCAT	900
GAGCTCAAAG	ATGCTGCAGA	TAAATGCCGA	CCACACTAC	TTTACACAGG	TCTTCTCGGA	960
CCTGAAGAAC	GAGAGCGGCC	AGGAGGACAA	GAGCGGCTC	CTCCTAGGCC	TGGATCGGTG	1020
AGCACTGTAG	CTTGGCTCAT	GGCTCAAGGA	TTCAATGCAT	TTTTAAGAAT	TTATTATTAA	1080
ATCAGTTTGG	TGACAG					

Seq ID NO: 634 Protein sequence
Protein Accession #: NP_003876.1

50
55

1	11	21	31	41	51	
MGTVLSLSPS	YRKATLFDG	AATVGHYTAV	QNSKNANDKN	LKRESLISVL	PWKRIVAVSA	60
KXKNSKKVQP	NSSYQNNITE	LNNENLKKSL	SCANLSTFAQ	PPPAQPPAPP	ASQLGGSQTG	120
GSSSVKKAPH	PAVTSAGTPK	RVIVQASTSE	LRLCLGEFLC	RRCYRLKHL	PTDFVLWLR	180
VDRSLLQGN	ODQGFITPAN	VVFLYMLCRD	VISSEVGSDE	ELQAVLLTCL	YLSYSYMGNE	240
ISYPLKPELV	ESCKEAFNDR	CLSVINLMSS	KMLQINADPH	YPTQVPSDLK	NESGQEDKIK	300
LLGLDR						

TABLE 79A:

5	Pkey:	Unique Eos probeset identifier number			
	ExAccn:	Exemplar Accession number, Genbank accession number			
	UnigeneID:	Unigene number			
	Unigene Title:	Unigene gene title			
	Seq ID No.:	Sequence identification number linking information in Table 79A to sequences in Table 80			
10	Pkey	ExAccn	UnigeneID	Unigene Title	Seq ID No.
15	424212	NM_005814	Hs.143131	glycoprotein A33 (transmembrane)	Seq ID No. C1 & C217
	424503	NM_002205	Hs.149509	Integrin, alpha 5 (fibronectin receptor,	Seq ID No. C2 & C218
	418007	M13509	Hs.83169	matrix metalloproteinase 1 (interstitial	Seq ID No. C3 & C219
	418007	M13509	Hs.83169	matrix metalloproteinase 1 (interstitial	Seq ID No. C4 & C220
	418738	AW338633	Hs.6682	solute carrier family 7, (cationic amino	Seq ID No. C5 & C221
20	443548	AJ085198	Hs.164226	Thrombospondin 1	Seq ID No. C6 & C222
	409956	AW103364	Hs.727	inhibin, beta A (activin A, activin AB a	Seq ID No. C7 & C223
	422867	L32137	Hs.1584	cartilage oligomeric matrix protein (psa	Seq ID No. C8 & C224
	444381	BE387335	Hs.283713	hypothetical protein BC014245	Seq ID No. C9 & C225
	421582	AJ910275	Hs.350470	trifol factor 1 (breast cancer, estroge	Seq ID No. C10 & C226
25	411789	AF245505	Hs.72157	Adfican	Seq ID No. C11 & C227
	452281	T93500	Hs.28792	Homo sapiens cDNA FLJ11041 fis, clone PL	Seq ID No. C12
	428698	AA852773	Hs.334838	KIAA1866 protein	Seq ID No. C13 & C228
	421552	AF026692	Hs.105700	secreted frizzled-related protein 4	Seq ID No. C14 & C229
	425247	NM_005940	Hs.155324	matrix metalloproteinase 11 (stromelysin	Seq ID No. C15 & C230
30	432201	AJ538513	Hs.298241	Transmembrane protease, serine 3	Seq ID No. C16 & C231
	447377	X77343	Hs.334334	transcription factor AP-2 alpha	Seq ID No. C17 & C232
	446921	AB012113	Hs.16530	small inducible cytokine subfamily A (Cy	Seq ID No. C18 & C233
	416888	AJ078801	Hs.89436	cadherin 17, L1 cadherin (liver-intestin	Seq ID No. C19 & C234
	432179	X75208	Hs.2913	EphB3	Seq ID No. C20 & C235
35	422578	AF239656	Hs.1545	caudal type homeo box transcription fact	Seq ID No. C21 & C236
	409889	AW630041	Hs.56337	suppression of tumorigenicity 14 (colon	Seq ID No. C22 & C237
	447033	AJ357412	Hs.157601	Predicted gene: Eos cloned; secreted w/V	Seq ID No. C23 & C238
	447033	AJ357412	Hs.157601	Predicted gene: Eos cloned; secreted w/V	Seq ID No. C24 & C239
	411975	AJ916058	Hs.144583	3'UTR of: dead ringer (Drosophila)-like	Seq ID No. C25 & C240
40	434206	AW138973	Hs.362915	ESTs, Weakly similar to S68860 mitogen l	Seq ID No. C26 & C241
	423936	U77629	Hs.135639	achaete-scute complex (Drosophila) homol	Seq ID No. C27 & C242
	447400	AK000322	Hs.18457	hypothetical protein FLJ20315	Seq ID No. C28 & C243
	449032	AA045573	Hs.22500	nuclear factor (erythroid-derived 2)-lik	Seq ID No. C29 & C244
	415214	AJ445236	Hs.125124	EphB2	Seq ID No. C30 & C245
45	443247	BE614387	Hs.333893	c-Myc target JPO1	Seq ID No. C31 & C246
	422048	NM_012445	Hs.288126	spondin 2, extracellular matrix protein	Seq ID No. C32 & C247
	410418	D31382	Hs.63325	transmembrane protease, serine 4	Seq ID No. C33 & C248
	446342	BE298665	Hs.14846	solute carrier family 7 (cationic amino	Seq ID No. C34 & C249
	411274	NM_002776	Hs.69423	kallikrein 10	Seq ID No. C35 & C250
50	104978	AJ99268	Hs.19322	Homo sapiens, Similar to RIKEN cDNA 2010	Seq ID No. C36 & C251
	422260	AA315933	Hs.105484	regenerating gene type IV	Seq ID No. C37 & C252
	409041	AB033025	Hs.50081	Hypothetical protein, XP_051860 (KIAA118	Seq ID No. C38 & C253
	420344	BE463721	Hs.97101	putative G protein-coupled receptor	Seq ID No. C39 & C254
	422163	AF027208	Hs.112360	prominin (mouse)-like 1	Seq ID No. C40 & C255
55	437935	AW939591	Hs.5940	mucin 13, epithelial transmembrane	Seq ID No. C41 & C256
	422330	D30783	Hs.115263	epiregulin	Seq ID No. C42 & C257
	408908	BE296227	Hs.250822	serine/threonine kinase 15	Seq ID No. C43 & C258
	407811	AW190902	Hs.40098	cysteine knot superfamily 1, BMP antagon	Seq ID No. C44 & C259
	437852	BE001836	Hs.256897	putative GPCR	Seq ID No. C45 & C260
60	408243	Y00787	Hs.624	interleukin 8	Seq ID No. C46 & C261
	426088	AF038007	Hs.166196	ATPase, Class I, type 8B, member 1	Seq ID No. C47 & C262
	439738	BE246502	Hs.9558	soma domain, immunoglobulin domain (Ig),	Seq ID No. C48 & C263
	419741	NM_007019	Hs.93002	ubiquitin carrier protein E2-C	Seq ID No. C49 & C264
	450983	AA305384	Hs.25740	ERD1 (S. cerevisiae)-like	Seq ID No. C50 & C265
65	417771	AA804698	Hs.82547	retinoid acid receptor responder (tazaro	Seq ID No. C51 & C266
	421379	Y15221	Hs.103982	small inducible cytokine subfamily B (Cy	Seq ID No. C52 & C267
	442006	AW975183	Hs.372210	ESTs, Weakly similar to S72482 hypotheti	Seq ID No. C53 & C268
	413048	M93221	Hs.75182	mannose receptor, C type 1	Seq ID No. C54 & C269
	443324	R44013	Hs.164225	ESTs	Seq ID No. C55 & C270
70	424917	AJ636208	Hs.96901	hypothetical protein FLJ23048	Seq ID No. C56 & C271
	424917	AJ636208	Hs.96901	hypothetical protein FLJ23048	Seq ID No. C57 & C272
	444527	NM_005408	Hs.11383	small inducible cytokine subfamily A (Cy	Seq ID No. C58 & C273
	422652	AJ005163	Hs.201378	Homo sapiens cDNA FLJ40427 fis	Seq ID No. C59 & C274
	450726	AW204800	Hs.355452	HUMPSPBA Human pulmonary surfactant-asso	Seq ID No. C60 & C275
75	416965	N26223	Hs.160436	MDAC1	Seq ID No. C61 & C276
	442275	AW449467	Hs.54795	Homo sapiens secretoglobulin, family 3A, m	Seq ID No. C62 & C277
	431745	AW972448	Hs.163425	Novel FGENESH predicted cadherin repeat	Seq ID No. C63 & C278
	431745	AW972448	Hs.163425	Novel FGENESH predicted cadherin repeat	Seq ID No. C64 & C279
	453142	AA033648	Hs.7473	Homo sapiens gap junction protein, alpha	Seq ID No. C65 & C280
80	421669	NM_014459	Hs.106511	protocadherin 17	Seq ID No. C66 & C281
	444090	S69115	Hs.10306	natural killer cell group 7 sequence	Seq ID No. C67 & C282
	421563	NM_006433	Hs.105806	granulysin	Seq ID No. C68 & C283
	430413	AW842182	Hs.241392	small inducible cytokine A5 (RANTES)	Seq ID No. C69 & C284
	414991	C17898		Homo sapiens up-regulated by BCG-CWS (LO	Seq ID No. C70 & C285
	419833	AA251131	Hs.220697	Homo sapiens tryptophanyl-IRNA synthetas	Seq ID No. C71 & C286
	424943	AJ077260	Hs.153924	death-associated protein kinase 1	Seq ID No. C72 & C287

5	430890	X54232	Hs.2699	glypican 1	Seq ID No. C73 & C288
	452401	NM_007115	Hs.29352	tumor necrosis factor, alpha-induced pro	Seq ID No. C74 & C289
	439180	AI393742	Hs.199067	v-erb-b2 avian erythroblastic leukemia v	Seq ID No. C75 & C290
	410407	X66839	Hs.63287	carbonic anhydrase IX	Seq ID No. C76 & C291
	418526	BE019020	Hs.85838	solute carrier family 18 (monocarboxylic	Seq ID No. C77 & C292
	422627	BE336857	Hs.118787	transforming growth factor, beta-induced	Seq ID No. C78 & C293
	430486	BE062109	Hs.241551	chloride channel, calcium activated, fam	Seq ID No. C79 & C294
	423673	BE003054	Hs.1695	matrix metalloproteinase 12 (macrophage	Seq ID No. C80 & C295
10	423673	BE003054	Hs.1896	matrix metalloproteinase 12 (macrophage	Seq ID No. C81 & C296
	431846	BE019924	Hs.271580	uroplakin 1B	Seq ID No. C82 & C297
	431958	X63629	Hs.2877	cadherin 3, type 1, P-cadherin (placenta	Seq ID No. C83 & C298
	448733	NM_005829	Hs.187958	solute carrier family 6 (neurotransmitter	Seq ID No. C84 & C299
	428440	BE382756	Hs.169902	solute carrier family 2 (facilitated glu	Seq ID No. C85 & C300
15	428484	AF104032	Hs.184601	solute carrier family 7 (cationic amino	Seq ID No. C86 & C301
	429211	AF052693	Hs.198249	gap junction protein, beta 5 (connexin 3	Seq ID No. C87 & C302
	423634	AW959908	Hs.1690	heparin-binding growth factor binding pr	Seq ID No. C88 & C303
	457819	AA057484	Hs.35406	FLJ20522 Hypothetical protein FLJ20522	Seq ID No. C89 & C304
	424687	J05070	Hs.151738	matrix metalloproteinase 9 (gelatinase B	Seq ID No. C90 & C305
20	418462	BE001595	Hs.85266	integrin, beta 4	Seq ID No. C91 & C306
	439606	W79123	Hs.58581	G protein-coupled receptor 87	Seq ID No. C92 & C307
	407720	AB037776	Hs.38002	immunoglobulin superfamily, member 9	Seq ID No. C93 & C308
	418543	NM_005329	Hs.85962	hyaluronan synthase 3	Seq ID No. C94 & C309
	417512	X76634	Hs.82226	glycoprotein (transmembrane) nmb	Seq ID No. C95 & C310
25	415817	U88967	Hs.78867	protein tyrosine phosphatase, receptor-t	Seq ID No. C96 & C311
	415817	U88967	Hs.78867	protein tyrosine phosphatase, receptor-t	Seq ID No. C97 & C312
	415817	U88967	Hs.78867	protein tyrosine phosphatase, receptor-t	Seq ID No. C98 & C313
	415817	U88967	Hs.78867	protein tyrosine phosphatase, receptor-t	Seq ID No. C99 & C314
	415817	U88967	Hs.78867	protein tyrosine phosphatase, receptor-t	Seq ID No. C100 & C315
30	415817	U88967	Hs.78867	protein tyrosine phosphatase, receptor-t	Seq ID No. C101 & C316
	415817	U88967	Hs.78867	protein tyrosine phosphatase, receptor-t	Seq ID No. C102 & C317
	415817	U88967	Hs.78867	protein tyrosine phosphatase, receptor-t	Seq ID No. C103 & C318
	421817	AF148074	Hs.108660	ATP-binding cassette, sub-family C (CFTR	Seq ID No. C104 & C319
	421817	AF148074	Hs.108660	ATP-binding cassette, sub-family C (CFTR	Seq ID No. C105 & C320
35	409420	Z15008	Hs.64451	laminin, gamma 2 (nicotin (100kD), kalini	Seq ID No. C106 & C321
	440659	AF134160	Hs.7327	claudin 1	Seq ID No. C107 & C322
	408790	AW580227	Hs.47860	neurotrophic tyrosine kinase, receptor,	Seq ID No. C108 & C323
	408790	AW580227	Hs.47860	neurotrophic tyrosine kinase, receptor,	Seq ID No. C109 & C324
	408790	AW580227	Hs.47860	neurotrophic tyrosine kinase, receptor,	Seq ID No. C110 & C325
40	450701	H39960	Hs.288467	hypothetical protein XP_098151 (neurine-	Seq ID No. C111 & C326
	414774	X02419	Hs.77274	plasminogen activator, urokinase	Seq ID No. C112 & C327
	413691	AB023173	Hs.75478	ATPase, Class VI, type 11B	Seq ID No. C113 & C328
	453857	AL080235	Hs.35861	Ras-Induced senescence 1 (RIS1)	Seq ID No. C114 & C329
45	449101	AA205847	Hs.23016	G protein-coupled receptor	Seq ID No. C115 & C330
	429263	AA019004	Hs.196395	ATP-binding cassette, sub-family A (ABC1	Seq ID No. C116 & C331
	421474	U76362	Hs.104637	solute carrier family 1 (glutamate trans	Seq ID No. C117 & C332
	421753	BE314828	Hs.107911	ATP-binding cassette, sub-family B (MDR/	Seq ID No. C118 & C333
	408482	NM_000676	Hs.45743	adenosine A2b receptor	Seq ID No. C119 & C334
50	426761	AI015709	Hs.172089	PORIMIN Pro-oncogene receptor inducing me	Seq ID No. C120 & C335
	429736	AF125304	Hs.212680	tumor necrosis factor receptor superfam	Seq ID No. C121 & C336
	430985	AA490232	Hs.27323	ESTs, Weakly similar to I78885 serine/th	Seq ID No. C122 & C337
	431890	X17033	Hs.271986	integrin, alpha 2 (CD49B, alpha 2 subuni	Seq ID No. C123 & C338
	432583	AW023624	Hs.162282	potassium channel TASK-4; potassium chan	Seq ID No. C124 & C339
55	440872	X97058	Hs.16362	pyrimidinergic receptor P2Y, G-protein c	Seq ID No. C125 & C340
	453102	NM_007197	Hs.31664	frizzled (Drosophila) homolog 10	Seq ID No. C126 & C341
	428513	BE220806	Hs.184697	plexin C1	Seq ID No. C127 & C342
	430280	AA361258	Hs.237868	interleukin 7 receptor	Seq ID No. C128 & C343
	428486	AW583497	Hs.184604	pancreatic polypeptide	Seq ID No. C129 & C344
	457489	AI693815	Hs.127179	cryptic gene	Seq ID No. C130 & C345
60	432874	W84322	Hs.279551	melanoma inhibitory activity	Seq ID No. C131 & C346
	445891	AW391342	Hs.199460	DPCR1 protein	Seq ID No. C132 & C347
	445891	AW391342	Hs.199460	DPCR1 protein	Seq ID No. C133 & C348
	404682			ortholog of mouse polydomain protein	Seq ID No. C134 & C349
65	429547	AW009166	Hs.59376	FGENESH predicted novel secreted protein	Seq ID No. C135 & C350
	404287			FGENESH predicted novel CUB-domain conta	Seq ID No. C136 & C351
	404287			FGENESH predicted novel CUB-domain conta	Seq ID No. C137 & C352
	404287			FGENESH predicted novel CUB-domain conta	Seq ID No. C138 & C353
	418318	U47732	Hs.84072	transmembrane 4 superfamily member 3	Seq ID No. C139 & C354
70	444754	T83911	Hs.11881	transmembrane 4 superfamily member 4	Seq ID No. C140 & C355
	432596	AJ224741	Hs.278461	matrilin 3	Seq ID No. C141 & C356
	444008	BE395085	Hs.334762	type I transmembrane protein Fn14	Seq ID No. C142 & C357
	428505	AL035461	Hs.2281	chromogranin B (secretogranin 1)	Seq ID No. C143 & C358
	448844	AI581519	Hs.177164	FGENESH predicted novel cell surface pr	Seq ID No. C144 & C359
	448844	AI581519	Hs.177164	FGENESH predicted novel cell surface pr	Seq ID No. C145 & C360
75	428392	H10233	Hs.2265	secretory granule, neuroendocrine protel	Seq ID No. C146 & C361
	448030	N30714	Hs.325960	membrane-spanning 4-domains, subfamily A	Seq ID No. C147 & C362
	422109	873265	Hs.1473	gaslin-releasing peptide	Seq ID No. C148 & C363
	449048	Z45051	Hs.22920	similar to S68401 (cattle) glucose induc	Seq ID No. C149 & C364
	417931	W95642	Hs.82961	trefoll factor 3 (intestinal)	Seq ID No. C150 & C365
80	419216	AU076718	Hs.164021	small inducible cytokine subfamily B (Cy	Seq ID No. C151 & C366
	426227	U67058	Hs.154299	Human proteinase activated receptor-2 mR	Seq ID No. C152 & C367
	413554	AA319148	Hs.75426	secretogranin II (chromogranin C)	Seq ID No. C153 & C368
	445417	AK001058	Hs.12680	a disintegrin-like and metalloprotease w	Seq ID No. C154 & C369
	426322	J05068	Hs.2012	transcobalamin I (vitamin B12 binding pr	Seq ID No. C155 & C370

5	413718	BE439580	Hs.75498	small inducible cytokine subfamily A (Cy	Seq ID No. C156 & C371
	431462	AW583672	Hs.255311	granin-like neuroendocrine peptide precu	Seq ID No. C157 & C372
	416498	U33632	Hs.79351	potassium channel, subfamily K, member 1	Seq ID No. C158 & C373
	413095	AA494369	Hs.30715	potassium voltage-gated channel, Isk-rel	Seq ID No. C159 & C374
	426125	X87241	Hs.166994	FAT tumor suppressor (Drosophila) homolo	Seq ID No. C160 & C375
	436729	BE621807	Hs.351316	transmembrane 4 superfamily member 1	Seq ID No. C161 & C376
	437145	AF007216	Hs.5462	solute carrier family 4, sodium bicarbon	Seq ID No. C162 & C377
	451820	AW058357	Hs.199248	ESTs	Seq ID No. C163 & C378
10	427557	NM_002659	Hs.179857	plasminogen activator, urokinase recepto	Seq ID No. C164 & C379
	408308	AL033377	Hs.44197	hypothetical protein DKFZp564D0462	Seq ID No. C165 & C380
	421340	F077B3	Hs.1369	decay accelerating factor for complement	Seq ID No. C168 & C381
	428187	A1687303	Hs.285529	G protein-coupled receptor 49	Seq ID No. C167 & C382
	428187	A1687303	Hs.285529	G protein-coupled receptor 49	Seq ID No. C168 & C383
15	422278	AF072873	Hs.114218	frizzled (Drosophila) homolog 6	Seq ID No. C169 & C384
	446619	AU076643	Hs.313	secreted phosphoprotein 1 (osteopontin,	Seq ID No. C170 & C385
	419452	U33635	Hs.90572	PTK7 protein tyrosine kinase 7	Seq ID No. C171 & C386
	428242	H55709	Hs.2250	leukemia inhibitory factor (cholinergic	Seq ID No. C172 & C387
	439659	AW970780	Hs.59483	leucine-rich repeat-containing G protein	Seq ID No. C173 & C388
20	411825	AK000334	Hs.352415	solute carrier family 39 (zinc transport	Seq ID No. C174 & C389
	412314	AA825247	Hs.350084	G protein-coupled receptor 27 (GPR27) (S	Seq ID No. C175 & C390
	429150	AF120103	Hs.197368	smoothened (Drosophila) homolog	Seq ID No. C176 & C391
	419073	AW372170	Hs.183918	transmembrane receptor Unc5H2 mRNA	Seq ID No. C177 & C392
	411828	AW161449	Hs.72290	wingless-type MMTV integration site fami	Seq ID No. C178 & C393
25	419508	AW997938	Hs.90786	ATP-binding cassette, sub-family C (CFTR	Seq ID No. C179 & C394
	421779	A1879159	Hs.108219	wingless-type MMTV integration site fami	Seq ID No. C180 & C395
	439668	A1091277	Hs.302634	frizzled (Drosophila) homolog 8	Seq ID No. C181 & C396
	433336	AF017986	Hs.31386	secreted frizzled-related protein 2 (str	Seq ID No. C182 & C397
	436872	AA284879	Hs.25640	claudin 3	Seq ID No. C183 & C398
30	410268	AA316181	Hs.61635	six transmembrane epithelial antigen of	Seq ID No. C184 & C399
	416370	N90470	Hs.203687	CD38 antigen (p45)	Seq ID No. C185 & C400
	437062	AA861697	Hs.120591	ESTs	Seq ID No. C186 & C401
	421481	AW391972	Hs.104696	KIAA1324 protein	Seq ID No. C187 & C402
	444151	AW972817	Hs.128749	alpha-methylacyl-CoA racemase	Seq ID No. C188 & C403
35	426174	AA547959	Hs.115838	Homo sapiens similar to Echinoidin (LOC1	Seq ID No. C189 & C404
	410037	AB020726	Hs.58009	KIAA0918 protein	Seq ID No. C190 & C405
	425071	NM_013989	Hs.154424	deiodinase, iodothyronine, type II	Seq ID No. C191 & C406
	421829	AB018330	Hs.108708	calcium/calmodulin-dependent protein kin	Seq ID No. C192 & C407
	418576	AW968159	Hs.302740	Epithelial calcium channel 2, Cat-like A	Seq ID No. C193 & C408
40	419693	AA133749	Hs.301350	FXFD domain-containing ion transport reg	Seq ID No. C194 & C409
	419693	AA133749	Hs.301350	FXFD domain-containing ion transport reg	Seq ID No. C195 & C410
	448988	Y09763	Hs.22785	gamma-aminobutyric acid (GABA) A recepto	Seq ID No. C196 & C411
	448988	Y09763	Hs.22785	gamma-aminobutyric acid (GABA) A recepto	Seq ID No. C197 & C412
	448988	Y09763	Hs.22785	gamma-aminobutyric acid (GABA) A recepto	Seq ID No. C198 & C413
45	448988	Y09763	Hs.22785	gamma-aminobutyric acid (GABA) A recepto	Seq ID No. C199 & C414
	430144	A1732722	Hs.98927	ERGL protein; ERGIC-53-like protein	Seq ID No. C200 & C415
	408833	AW612282	Hs.254835	ESTs	Seq ID No. C201 & C416
	452017	AF109302	Hs.27495	prostate cancer associated protein 7	Seq ID No. C202 & C417
50	415892	C05837	Hs.145907	hypothetical protein FLJ13593	Seq ID No. C203 & C418
	415892	C05837	Hs.145907	hypothetical protein FLJ13593	Seq ID No. C204 & C419
	443991	NM_002250	Hs.10082	potassium intermediate/small conductance	Seq ID No. C205 & C420
	425876	C75094	Hs.334514	NG22 protein	Seq ID No. C206 & C421
	432600	BE391046	Hs.278952	AIM-1 protein	Seq ID No. C207 & C422
55	452955	AW390282	Hs.31130	transmembrane 7 superfamily member 2	Seq ID No. C208 & C423
	424339	BE257148	Hs.145416	endoglycan	Seq ID No. C209 & C424
	426263	NM_001187	Hs.155419	BCL2-interacting killer (apoptosis-induc	Seq ID No. C210 & C425
	421537	BE383488	Hs.105547	neural proliferation, differentiation an	Seq ID No. C211 & C426
	434293	NM_004445	Hs.3796	EphB6	Seq ID No. C212 & C427
	427715	BE245274	Hs.180428	KIAA1181 protein	Seq ID No. C213 & C428
60	413049	NM_002161	Hs.823	hepsin (transmembrane protease, serine 1	Seq ID No. C214 & C429
	414555	N98569	Hs.76422	phospholipase A2, group IIA (platelets,	Seq ID No. C215 & C430
	422424	A1186431	Hs.296638	prostate differentiation factor	Seq ID No. C216 & C431
	432378	AA93046	Hs.146133	ESTs	Seq ID No. C432 & C433
	409041	AB033025	Hs.50081	Hypothetical protein, XP_051880 (KIAA119	Seq ID No. C434 & C435

65 TABLE 79B

Pkey: Unique Eos probeset identifier number
 CAT number: Gene cluster number
 Accession: Genbank accession numbers

70

Pkey CAT Number Accession
 414991 1785136_1 D78831 C17898 D78653

75 TABLE 79C

Pkey: Unique number corresponding to an Eos probeset
 Ref: Sequence source. The 7 digit numbers in this column are Genbank Identifier (GI) numbers. "Dunham 1. et al." refers to the publication entitled "The DNA sequence of human chromosome 22." Dunham 1. et al., Nature (1999) 402:489-495.
 Strand: Indicates DNA strand from which exons were predicted.
 Nt_position: Indicates nucleotide positions of predicted exons.

80

Pkey Ref Strand Nt_position

5 404692 9797231 Minus 40977-41150
 404287 2326514 Plus 53134-53281
 404287 2326514 Plus 53134-53281
 404287 2326514 Plus 53134-53281

Table 80:

Seq ID NO: C1 DNA Sequence
Nucleic Acid Accession #: NM_005814
Coding sequence: 345..1304

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	AGTAGGTGAC	ACATGAGCCC	AGCCCCAGCT	CACCTGCCAA	TCCAGCTGAG	GAGCTCAOCT	180
	GCCAAATCCG	CTGAGGCTGG	GCAGAGGTGG	GTGAGAAGAG	GGAAATTTGC	AGGGACCTCC	240
	AGTTGGGCCA	GGCCAGAACG	TGCTGTAGCT	TTAACCAGAC	AGCTCAGACC	TGTCTGGAGG	300
15	CTGCCAGTGA	CAGGTTAGGT	TTAGGGCAGA	GAAGAAGCAA	GACCATGGTG	GGGAGATGTT	360
	GGCCTGTGTT	GTGGACACTC	TGTGCACTCA	GGGTGACCGT	CGATGCCATC	TCTGTGGAAA	420
	CTCCGCAAGG	CGTTCCTGGG	GCCTGCGAGG	GAAGAAGTGT	CACCTGCCCC	TGCACCTACC	480
	ACACTTCCAC	CTCCAGTCGA	GAGGGACTTA	TTCAATGGGA	TAAGCTCCTC	CTCACTCATA	540
	CGGAAGGGGT	GGTCACTCTG	CGGTTTCAA	ACAAAACTA	CATCCATGGT	GAGCTTTATA	600
20	AGAAATCGGT	CAGCATATCC	AACAATGCTG	AGCAGTCCGA	TGCCATCCATC	ACCATGTATC	660
	AGCTGACCAT	GGCTGACAA	GGCACCCTACG	AGTGTCTCTG	CTGCTGTATG	TCAGACCTGG	720
	AGGGCAACAC	CAAGTCACGT	GTCCGCTCTG	TGGTCTCTGT	GCCACCTCTC	AAACCAGAAAT	780
	GCAGCATCGA	GGGAGAGACC	ATAATTTGGG	ACAACATCCA	GCTGACCTGC	CAATCAAAGG	840
	AGGGCTCAAC	AAACCTCTAG	TACAGCTGGA	AGAGGTACAA	CATCCGAAAT	CAGGAGCAGC	900
25	CCCTGGCCCA	CAGGATCTCA	GGTCAGCTCG	TCTCCCTGAA	GAATATCTCC	ACAGACACAT	960
	CGGGTTACTA	CACTCTGACC	TCCAGCAATG	AGGAGGGGAC	GCAGTCTCTG	ATCATCACGG	1020
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	TTTGACGCCCT	TTATTCATTT	GGCATCATCA	TCTACTCTGT	CTGCTGCCGA	GGGAGGACG	1140
	ACAAACATGA	AGACAAGGAG	GATGCAAGGC	CGAACCCGGA	AGCCTATGAG	GAGCCACCCG	1200
30	AGCAGCTAAG	AGAACTTTCC	AGAGAGAGGG	AGGAGGAGGA	TGACTACAGG	CAAGAAGAGC	1260
	AGAGGAGCAC	TGGCCGTGAA	TCCCGGAGCC	ACCTCGACCA	GTGACAGGCC	AGCAGCAGAG	1320
	GGCGGCGGAG	GAAGGGTTAG	GGGTTCATTC	TCCCGCTTCC	TGGCCCTCCCT	TCTCTTTTCT	1380
	AAGCCCTGTT	CTCCTGTCCC	TCCATCCGAG	ACATTGATGG	GGACATTTCT	TCCCGAGTGT	1440
	CAGCTGTGGG	GAACATGGCT	GGCCTGGTAA	GGGGGTCTCT	GTGCTGATCC	TGCTGACCTC	1500
35	ACTGTCTGTT	GAAGTAAACC	TCTCTGGCTG	TGACACCTGG	TGGGGGCTCG	GCTCTCACTC	1560
	AAGACCAAGC	TGCAGCCTCC	ACTTCCCTCG	TAGTTGGCAG	GAGCTCTCTG	AAGCACAGCG	1620
	CTGAGCATGG	GGCCTCTCCA	CTCAGAACTC	TCCAGGGAGG	CGATGCCAGC	CTTGGGGGGT	1680
	GGGGCTGTCT	CTGCTCACCT	GTGTGCCGAG	CACCTGGAGG	GGCACCAGGT	GGAGGGTTTG	1740
	CACCTCCAC	ATCTTTCTTG	AATGAATGAA	AGAATAAGTG	AGTATAGCTT	GGCCTGCTAT	1800
40	TGGCCTGGCC	TCCAGCTCCC	ACTCCCTTTC	CAACCTCACT	TCCCGTAGCT	GCCAGTATGT	1860
	TCCAAACCTC	CTTGGGAGG	CCACCTCCCA	CTCCTGCTGC	ACAGGCCCTG	GGGAGCTTTT	1920
	GCCCAACAC	TTTCCATCTC	TGCCCTGTCA	TATCGTACCT	GTCCCTCCAG	GCCCATCTCA	1980
	AATCACAGAG	ATTTCCTCAA	CCCTATCTTA	ATTGTCCACA	TACGTGGAAA	CAATCCTGTT	2040
	ACTCTGTCCC	ACGTCCAAAT	ATGGGCGACA	AGGCACAGTC	TTCTGAGCGA	GTGCTCTCAC	2100
45	TGTATTAGAG	CGCCAGCTCC	TGGGGCAGG	GCCTGGGCTC	CATGGCTTTT	GCTTTCCTTG	2160
	AAGCCCTAGT	AGCTGGCGCC	CATCTTAGTG	GGCACTTAAG	CTTAATTTGG	GAAGCTGCTT	2220
	TGATTGGTTG	TGCTTCTCCT	TCTCTGGTCT	CCTTGAGATG	ATCGTAGACA	CAGGGATGAT	2280
	TCCCAACCAA	ACCCAGGTAT	TCATTCAAGT	AGTTAAACAC	GAATTGATT	AAAGTGAACA	2340
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50	GGCCAGAGGT	ATTGGCTAGT	CTCCTCAACC	CACATGGGGT	TCTTGGTATG	TCTTGCATCC	2460
	CGATACCTCA	GCCTTGGCCC	TGCCAGGCC	ATTGGGCTC	TGCTTTCTCT	GTGGGGCTGT	2520
	CCTGCTGCCC	TCCACAGGCC	TCTTCTCTGT	TGTGAGCAT	TTCTTCTACT	CTTGAGAGCT	2580
	CAGGCTGCGT	TAGGGCTGCT	TAGGCTCTAT	GGACCACTGG	CTGGTCTCAC	CCAACCTGAG	2640
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Seq ID NO: C2 DNA Sequence
Nucleic Acid Accession #: Eos sequence
Coding sequence: 1..3150

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	GGCTTCAACT	TAGACGGGGA	GGCCCCAGCA	GTACTCTGGG	GGCCCCCGGG	CTCCTTCTTC	180
	GGATTCTCAG	TGGAGTTTFA	CGGGCCGGGA	ACAGACGGGG	TCACTGTGCT	GGTGGGAGCA	240
	CCCAAGGCTA	ATACCAAGCA	GCCAGGAGTG	CTGCAGGGTG	GTGCTGTCTA	CTCTGTCTCT	300
	TGGGGTGCCA	GGCCCAACAC	GTGCCACCCC	ATTGAATTTG	ACAGCAAAAG	CTCTGGGCTC	360
70	CTGGAGTCTT	CATCTGTCCG	CTCAGAGGGA	GAGGAGGCTG	TGGAGTACAA	GTCTTGTGAG	420
	TGGTTCGGGG	CAACAGTTGG	AGCCCATGGC	TCTCTCATCT	TGGCATGGGC	TCCACTGTAC	480
	AGCTGGGCGA	CAGAGAAAGG	GCCACTGAGC	GACCCCGTGG	GCACTGTGCT	CCTCTCCACA	540
	GATAACTTCA	CCCGAATTC	GGAGTATGCA	CCCTGCCGCT	CAGATTTCAG	CTGGGCAGCA	600
	GGACAGGGGT	ACTGCCAAGG	AGGCTTCAGT	GCGGAGTTCA	CCAGAGCTGG	CCGTGTGGTT	660
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	TTCACTGGTG	ATGACACAGA	AGACTTTGTT	GCTGGTGTGC	CCAAGGGGAA	CCTCACTTAC	900
	GGCTATGTCA	CCATCTCTAA	TGGCTCAGAC	ATTGATATCC	TCTACAACTT	CTCAGGGGAA	960
80	CAGATGGCGT	CCCTACTTGG	CTATGCAAGT	GCGGCGACAG	ACGTCAATGG	GGAGGGGCTG	1020
	GATGACTTGC	TGGTGGGGGC	ACCCCTGCTC	ATGGATCGGA	CCCTCTGACG	GCGGCTCTAG	1080
	GAGGTGGGCA	GGGTCTACGT	CTACCTGCGG	CACCCAGCCG	GCATAGAGCC	CACGCTCACC	1140
	CTTACCTTCA	CTGGCCATGA	TGAGTTTGGC	CGATTGGGCA	GCTCCTTGAC	CCCCCTGGGG	1200
	GACCTGGACC	AGGATGGCTA	CAATGATGTG	GCCATCGGGG	CTCCCTTTGG	TGGGGAGACC	1260
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Seq ID NO: C3 DNA Sequence

Nucleic Acid Accession #: NM_002421.2

Coding sequence: 1..1410

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GTTGAAAAAT TGAAGCAATG GCAGGAATTC TTTGGGCTGA AAGTGAAGTG GAAACCCAGT 240
GCTGAAACCC TGAAGTGAT GAAGCAGCCC AGATGTGGAG TGCTGATGT GGCTCAGTTT 300
GTCTCTACTG AGGGGAACCC TCGCTGGGAG CAAACACATC TGACCTACAG GATTGAAAT 360
TACAGGCCAG ATTGGCCAG AGCAGATGTG GACCATGCCA TTGAGAAAGC CTTCCACTC 420
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Seq ID NO: C4 DNA Sequence

Nucleic Acid Accession #: Bos sequence

Coding sequence: 1..1410

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GTTGAAAAAT TGAAGCAATG GCAGGAATTC TTTGGGCTGA AAGTGAAGTG GAAACCCAGT 240
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GTCTCTACTG AGGGGAACCC TCGCTGGGAG CAAACACATC TGACCTACAG GATTGAAAT 360
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GAAAGGTGGA CCAACAATT CAGAGATAC AACTACATC GTGTTGCGGC TCATGAACTC 660
GGCCATTCTC TTGCACTCTC CCATTCTACT GATATCGGGG CTTTGATGTA CCTAGCTAC 720
ACCTTCAGTG GTGATGTTCA GCTAGCTCAG GATGACATTG ATGGCATCCA AGCCATATAT 780
GGAGGTTCCC AAAATCTCTG CCAGCCATC GGCACACAAA CCCCANAAGC ATGTGACAGT 840
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Seq ID NO: C5 DNA Sequence
Nucleic Acid Accession #: NM_014331.2
Coding sequence: 1..1506

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Seq ID NO: C6 DNA Sequence
Nucleic Acid Accession #: NM_003246.1
Coding sequence: 112..3624

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	TCAGTTACCA	TCTGCAAAA	GGTGTCTGCG	CCCATCATGC	CCTGTCTCAA	TGCCACAGTT	1200
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	CCCCAGTTTG	GAGGCAAGGA	CTGGCTTGCT	GATGTAACAG	AAAACACAGT	CTGCAACAG	1740
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25	AGCTACCCCT	ATGGCAGCTG	GAATGTGGTT	GTCTGTCCCC	CTGGTTCACG	TGGAAATGGC	1860
	ATCCAGTGCA	CAGATGTTGA	TGAGTGCAAA	GAAGTGCCCT	ATGCCCTGCT	CAACCACAAT	1920
	GGAGAGCACC	GGTGTGAGAA	CACGGACCCC	GGCTACAACT	GCCTGCCCTG	CCCCCACGCG	1980
	TTCAACCGGT	CACAGCCCTT	CGGCCAGGGT	GTGGAACATG	CCACGGCCAA	CAAAAGGTTG	2040
	TGCAGGCCCC	GTAAACCCCTG	CACGGATGGG	ACCCACGACT	GCACCAAGAA	CGCCAAAGTGC	2100
30	AACTACCTGG	GCCACTATAG	CGACCCCATG	TACCGCTGCG	AGTGCAAGCC	TGGCTACGCT	2160
	GGCAATGGAG	CTGCTGTGGG	GGAGGACACA	GAACCTGGATG	GCTGGCCCAA	TGAGAACTCG	2220
	GTGTGCGTGG	CCAATGGCAG	TTACCATGTC	AAAAAGGATA	ATTGCCCCAA	CCTTCCCAAC	2280
	TCAGGGCAGG	AAGACTATGA	CAAGGATGGA	ATTGGTGTATG	CCTGTGATGA	TGACGATGAC	2340
	AATGATAAAA	TTCCAGATGA	CAGGACACAC	TGTCCATTCC	ATTACAACTC	AGCTCAGTAT	2400
35	GACTATGACA	GAGATGATGT	GGGAGACGCG	TGTGACAACT	GTCCCTACAA	CCACAACCCA	2460
	GATCAGGCGG	ACACAGACAA	CAATGGGGAA	GGAGACGCCCT	GTGCTGCAGA	CATTGATGGA	2520
	GACGGTATCC	TCAATGAAAG	GGACAACATG	CAGTACGTCT	ACAATGTGGA	CCAGAGAGAC	2580
	ACTGATATGG	ATGGGGTTGG	AGATCAGTGT	GACAATTGCC	CCTTGGAAAC	CAATCCGAT	2640
	CAGCTGGACT	CTGACTTCAG	CCGCATTTGA	GATACCTGTG	ACACCAATCA	GGATATTGAT	2700
40	GAGATGGGCC	ACCAGAACAA	TCCTGACAAC	TGTCCCTATG	TGCCCAATGC	CAACACGCTT	2760
	GAACATGACA	AAGATGGCAA	GGGAGATGCC	TGTGACCAAG	ATGATGACAA	CGATGGCATT	2820
	CCTGATGACA	AGGACAACAT	CAGACTCGTG	CCCAATCCCG	ACCAGAGGAA	CTCTGACGGC	2880
	GATGGTCGAG	GTGATGCCCT	CAAGATGAT	TTTGACCATG	ACAGTGTGCC	AGACATCGAT	2940
	GACATCTGTC	CTGAGAAATG	TGACATCAAT	GAGACCGATT	TCCGCTCGAT	CCAGATGATT	3000
45	CCCTCTGGACC	CCAAAGGGAC	ATCCCAAAAT	GACCCTAAT	GGGTGTGACG	CCATCAGGGT	3060
	AAAGAACTCG	TCCGACTGCT	CAACTGTGAT	CCTGGACTCG	CTGTAGGTTA	TGATGATTTT	3120
	AATGCTGTGG	ACCTCAGTGG	CACCTTCTTC	ATCAACAACG	AAAGGGACGA	TGACTATGCT	3180
	GGATTGTTGG	TTGGCTTACA	GTCCAGCAGC	CGCTTTTATG	TTGTGATGTG	GAAGCAAGTC	3240
	ACCCAGTCCCT	ACTGGGACAC	CAACCCCAAG	AGGGCTCAGG	GATACCTCGG	CCCTTCTGTG	3300
50	AAAGTTGTAA	ACTCCACCA	AGGGCCTGGC	GAGCAGCTGC	GGAAACGCCCT	GTGGCACACA	3360
	GGAAACACCC	TGGCCCGGTT	GCGCACCCCT	TGGCATGACC	CTCGTCACAT	AGGCTGGAAA	3420
	GATTTTCAAG	CCTACAGATG	GCCTCTCAGC	CACAGGCCAA	AGACGGGTTT	CATTAGAGTG	3480
	GTGATGATG	AAGGGAAGAA	AATCATGGCT	GACTCAGGAC	CCATCTATGA	TAAACCTTAT	3540
	GCTGTGGGTA	GACTAGGGTT	GTTTGTCTTC	TCTCAAGAAA	TGGTGTCTCT	CTCTGACCTG	3600
55	AAATACGAAT	GTAGAGATCC	CTAATCATCA	AATGTGTGAT	TGAAAGAGCT	ATCATTAACC	3660
	AATGCTGTGG	TGCACTCTGC	TGGAACATAT	GGCTTGAGAA	AACCCCAAGG	ATCACTCTTC	3720
	CTTGGCTTCC	TTCTTTTCTG	TGCTTGTATC	AGTGTGGACT	CCTAGAAACG	GCGACCTGCC	3780
	TCAAGAAAT	GCAGTTTTC	AAAACGACT	CATCAGCATT	CAAGCTTCAA	TGAATAAGAC	3840
	ATCTTCCAG	CATATAACA	ATTGCTTTGG	TTTCCCTTTG	AAAAAGCATC	TACTTGTCTC	3900
60	AGTGGGAAG	GTGCCCATTC	CACCTCTGCT	TTGTACAGAA	GCAGGGTGCT	ATTGTGAGGC	3960
	CATCTCT						3967

Seq ID NO: C7 DNA Sequence
Nucleic Acid Accession #: NM_002192
Coding sequence: 86..1366

65	1	11	21	31	41	51	
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70	AATCACAACA	ACTTTTGTCTG	CCAGGATGCC	CTTGCCTTGG	CTGAGAGGAT	TTCTGTTGGC	120
	AAGTTGCTGG	ATTATAGTGA	GGAGTTCCCC	CACCCAGGA	TCCGAGGGGC	ACAGCGGGGC	180
	CCCCGACTGG	CCGTCTCTGTG	CGCTGGCCGC	CCTCCCAAGG	GATGTACCCA	ACTCTCAGCC	240
	AGAGATGGTG	GAGGCGGTCA	AGAAGCACAT	TTTAAACATG	CTGCACTTGA	AGAAGAGACC	300
	CGATGTCAAC	CAGCCGGTAC	CCAAGGCGGC	GCTTCTGAAC	GCGATCAGAA	AGCTTCATGT	360
75	GGGCAAGATC	GGGGAGAAGC	GGTATGTGGA	GATAGAGGAT	GACATTGGAA	GGAGGGCAGA	420
	AATGAATGAA	CTTATGGAGC	AGACCTCGGA	GATCATCAGC	TTTGGCGAGT	CAGGAACAGC	480
	CAGGAAGACG	CTGCATCTCG	AGATTTCCAA	GGAAAGGCAGT	GACCTGTCTG	TGGTGGAGCG	540
	TGCAGAGTCT	TGGCTCTTCC	TAAAGTCCC	CAAGGCCAAC	AGGAACAGGA	CCAAAGTCAC	600
	CATCCGCTTC	TTCCAGCAGC	AGAAACACCC	GCAGGGCAGC	TTGGACACAG	GGGAAGAGGC	660
80	CGAGGAAGTG	GGCTTAAAGG	GGGAGAGGAG	TGAACCTGTYG	CTCTCTGAAA	AAGTAGTAGA	720
	CGCTCGGAAG	AGCAGCTGTC	ATGTCCTTCC	TGTCCTCAGC	AGCATCCAGC	GCTTGTCTGA	780
	CCAGGGCAGG	AGCTCCCTGG	ACGTTCCGAT	TGCCTGTGAG	CAGTGCAGG	AGAGTGGCGC	840
	CAGCTTGGTT	CTCTCGGACA	AGAAGAAGAA	GAAAGAAGAG	GAGGGGGGAG	GGAAAAAGAA	900
	GGGCGGAGGT	GAAGGTGGGG	CAGGAGCAGA	TGAGGAAAG	GAGCAGTCCG	ACAGACCTTT	960
	CCTCATGCTG	CAGGCCCGGC	AGTCTGAAGA	CCACCTCAT	CGCCGCGTC	GGCGGGGCTT	1020

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GGAGTGTGAT GGCAAGGTCA ACATCTGCTG TAAGAAACAG TTCTTTGTCA GTTTCAGGGA 1080
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TGAGTGGCCG AGCCATATAG CAGGCACGTC CGGGTCTCTA CTGTCTCTCC ACTCAACAGT 1200
CATCAACCCAC TACCGCATGC GGGGCCATAG CCCCTTTGCC AACCTCAAAT CGTGCTGTGT 1260
GCCCAACCAAG CTGAGACCCA TGTCCATGTT GTACTATGAT GATGGTCAAA ACATCATCAA 1320
AAAGGACATT CAGAACATGA TCGTGGAGGA GTGTGGGTGC TCATAGAGTT GCCCAGCCCA 1380
GGGGGAAAGG GAGCAAGAGT TGTCCAGAGA AGACAGTGGC AAAATGAAGA AATTTTAAAG 1440
GTTTCTGAGT TAACCAAGAA AATAGAAAT AAAAAACAAA CAAAAACAAA AAAAAACAA 1500
AAAAAACAA AAGTAAATTA AAAACAAACC TGATGAAACA GATGAAACAG ATGAAGGAAG 1560
ATGTGGAAAT CTTAGCTGCT CTTAGCCAGG GCTCAGAGAT GAAGCAGTGA AGAGACAGAT 1620
TGGGAGGGAA AGGGAGAAAT GGTACCCCTT TATTTCTCTT GAAATCACAC TGATGACATC 1680
AGTTGTITAA ACGGGGTATT GTCCCTTCCC CCGTTGAGGT TCCCTTGTGA GCTTGAATCA 1740
ACCAATCTGA TCTGCAGTAG TGTGGACTAG AACCAACCAA ATAGCATCTA GAAAGCCATG 1800
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Seq ID NO: C8 DNA Sequence
Nucleic Acid Accession #: NM_000095.1
Coding sequence: 26..2299

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1 11 21 31 41 51
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OCTGGCTGCC CTCGGGCGGT CCGGACAGGG CCAGAGCCCG TTGGGCTCAG ACCTGGGCCCC 120
GCAGATGCTT CGGGAAGTGC AGGAAACCAA CGGGGCGCTG CAGGACGTGC GGGACTGGCT 180
GGGCAGCAG GTACAGGAGA TCAGTTCTCT GAAAAACAG GTGATGGAGT GTGACGCTG 240
CGGATGTCAG CAGTCACTAC GCACCGGCTT ACCCAGGTG CGGCCCTGCT TCCACTGCGC 300
GCCCGGCTTC TGTCTCCCG GCGTGGCTTG CATCCAGAG GAGAGCGCG CGCGCTGCGG 360
CCCTGCGGCC GCGGCTTTCA CGGGCAACGG CTCGCACTGC ACCGACGTCA ACGAGTCAA 420
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CGTACTGTG CCGACTCAG GGCAGGAGGA TGTGGACCG GATGGCATCG GAGACGCTG 960
CGATCCGAT GCGACCGGG ACGGGTGCC CAATGAAAAG GACAACTGCC CGCTGGTGG 1020
GAAACCCAGC CAGCGCAACA CGGACGAGGA CAGTGGGGC GATGCGTGG ACAACTGCC 1080
GTCCCAAGG AACGACGACT AAAAGGACAC AGACCGGAC GCGCGGGCG ATGCGTGG 1140
CGACGACATC GACCGCGACC GAGTCCGCAA CAGGCGGAC AACTGCCCTA GGGTACCCAA 1200
CTCAGACCA GAGGACAGTG ATGGCGATGG TATAGGGAT GCGTGTGACA ACTGTCCCA 1260
GAAGAGCAAC CAGATCTAGG CGGATGTGGA CCACTCTTT GTGGGAGATG CTTGTGACAG 1320
CGATCAAGAC CAGGATGGAG ACGGACATCA GGAATCTGG GACAACTGTC CCACTGGTCC 1380
TAACAGTGCC CAGGAGGACT CAGACCAAGA TGCCAGGGT GATGCTTGG ACAGCGACGA 1440
CGACAAAGC GAGTCCCTG ACAGTCGGA CAATGCGCG CTGCTGCCCTA ACCCGGCCA 1500
GGAGGACGCG GACAGGGAG GCGTGGCGGA CGTGTGCCAG GACGACTTTG ATGAGACAA 1560
GGTGTAGAC AAGATCGAG GGTGTCCGA GAACGCTGAA GTCACTCTCA CCACTTTCAG 1620
GGCCTTCCAG ACAGTCTGTC TGGACCGGA GGGTGGCGG CAGATTGACC CCACTGGGT 1680
GGTGTCAAC CAGGAGAGG AGATCGTGA GACATGAAC AGCGACCCAG GCTTGGCTGT 1740
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GCCTGGCAFC CACTCAAGG CTGTGAAGTC TTCCAGAGC CCGGGGAAAC AGCTGCGGAA 1980
GCCTCTGTGG CATACAGGAG ACACAGATC CCAGGTGGG CTGCTGTGGA AGGACCGCG 2040
AAACGTGGGT TGGAGGACA AGAAGTCTTA TCGTTGGTTC CTGACGACCC GCGCCCAAGT 2100
GGCTACATC AGGGTGGAT TCATAGAGG CCCTGAGCTG GTGGCGGACA GCAAGTGGT 2160
CTTGGACACA ACCATGCGG GTGGCGGCTT GCGGCTCTTC TGCTTCTCCC AGGAGAACAT 2220
CATCTGGGCC AACCTGCGTT ACCGCTGCAA TGACACCATC CAGAGGACT ATGAGACCCA 2280
TCAGCTGGCG CAGGCTAGG GACCAAGGTG AGGACCGGCC GATGACAGC CACCTCACC 2340
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AAGGGCTCAG AGAGACAAA ATAAAGTGTG TGTGAGGG 2439

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Seq ID NO: C9 DNA Sequence
Nucleic Acid Accession #: XM_057014
Coding sequence: 143..874

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CGCGGGGAG CAGACGCTG ACCACGTTCC TCTCTCGGT CTCTCCGCG TCCAGTCCG 120
CGCTGCCCG CAGCGGGAG CCATCGGACC CCAGGCCCC GCGGCTCCD CGCAGCGGCT 180
CGCGGGCTC CTGCTGCTCC TGCTGCTGCA CTGCCCCCG CCGTGGAGCG CCTCTGAGT 240
CCCCAAGGGG AAGCAAAAG GGCAGCTCG GCAGAGGGAG GTGGTGGACC TGTATATGG 300
AATGTGCTTA CAGGGCCAG CAGGAGTCCC TGGTCAGAC GGGAGCCCTG GGGCCAATG 360
CATTCGGGT ACACCTGGGA TCCAGGTG GATGGATTG AAAGGAGAAA AGGGGAATG 420
TCTGAGGGA AGCTTTAGG AGTCTGGAC ACCCACTAC AAGCAGTGT CATGGAGTTC 480
ATTGAATTAT GGCATAGATC TTGGGAAAT TGCAGATGT ACATTTACA AGATGCGTTC 540
AAATAGTCT CTAAGAGTT TGTTCAGTGG CTCACTTCG CTAAATGCA GAAATGCATG 600
CTGTACGGT TGGTATTTCA CATTCAGT AGCTGATGT TCAGGACCTC TTCCCATGGA 660
AGCTATATTT TATTGGACC AAGGAAGCCC TGAAATGAAT TCAACAATTA ATATTCATCG 720

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5	CACCTCTCTCT	GTGGAAGGAC	TTTGTGAAGG	AATGGTGCT	GGATTAGTGG	ATGTTGCTAT	780
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	TTCTCGCATC	ATTATTGAAAG	AACATACAAA	ATAAATGCTT	TAATTTTCAT	TTGCTACCTC	900
	TTTTTTTATT	ATGCCCTTGA	ATGGTTCACT	TAAATGACAT	TTTAAATAAG	TTTATGTATA	960
	CATCTGAATG	AAAAGCAAG	CTAAATATGT	TTACAGACCA	AAGTGTGATT	TCACACTGTT	1020
	TTTAAATCTA	GCATTATTTCA	TTTTCCCTTCA	ATCAAAAGTG	GTITCAATAT	TTTTTTTAGT	1080
	TGGTTAGAAAT	ACTTTCCTTCA	TAGTCACATT	CTCTCAACCT	ATAATTTGGA	ATATTGTGT	1140
	GGTCTTTTGT	TTTTTCTCTT	AGTATAGCAT	TTTTAAAAAA	ATATAAAGC	TACCAATCTT	1200
10	TGTACAATTT	GTAAATGTTA	AGAATTTTTT	TTATATCTGT	TAAATAAAAA	TTATTTCCAA	1260
	CAACCTTAAA	AAAAAATAAA	AAAA				1284

Seq ID NO: C10 DNA Sequence

Nucleic Acid Accession #: NM_003225

Coding sequence: 111.295

15	1	11	21	31	41	51	
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	GGTGATCTGC	GGCCGTGTC	TGGTGTCCAT	GCTGGCCCTC	GGCACCCCTG	CCGAGGCCCA	120
20	GACAGAGACG	TGTACAGTGG	CCCCCGTGA	AAGACAGAAAT	TGTGGTTTTC	CTGGTGTAC	180
	GCCTCCACG	TGTGCAATA	AGGGCTGCTG	TTTCAAGCAG	ACCGTTCTGT	GGGTCCCTG	240
	GTGCTTCTAT	CCTAATACCA	TGCAAGTCCC	TCCAGAAAGG	GAGTGTGAAT	TTTAGACACT	300
	TCTGACGGGA	TCCTGCTGCA	TCTTGAAGGG	GTGCCGTCCC	CAGCAAGGTG	ATTAGTCCCA	360
	GAGCTCGGCT	GCCACCTCCA	CCGACACCT	CAGACAGCT	TCGTGAGCTG	TGCTCGGCT	420
25	CACACACAG	ATTGACTGCT	CTGACTTTGA	CTACTCAAAA	TTGGCCTAAA	AATTAAGA	480
	GATCGATATT	AAAAAATAAA	AAAAAATAAA	AAAAAATAAA	AAAAAATAAA	AAAAAATAAA	540

Seq ID NO: C11 DNA Sequence

Nucleic Acid Accession #: NM_015419.1

Coding sequence: 1..8487

30	1	11	21	31	41	51	
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	CCGCGAGTGG	CCCTGGCCCTG	CCCCCATCCT	TGTGCTGCT	ACGTCCCCAG	CGAGGTCCAC	120
35	TGCACGTTCC	GATCCCTGGC	TTCCTGTCCC	GCTGGCATTG	CTAGACACGT	GGAAAGAATC	180
	AATTTGGGGT	TAAATAGCAT	ACAGGCCCTG	TCAGAAACCT	CATTTCAGGG	ACTGACCAAG	240
	TTGAGCTAC	TTATGATTCA	CGGCAATGAG	ATCCCAAGCA	TCCCGATGG	AGCTTTAAGA	300
	GACCTCAGCT	CTCTTCAGGT	TTTCAAGTTC	AGCTCAACA	AGCTGAGAGT	GATCAGGAA	360
40	CAGACCTCC	AGGGTCTCTC	TAACTTAATG	AGGCTGCACA	TTGACCACAA	CAAGATCGAG	420
	TTTATCCACC	CTCAAGCTTT	CAACGGCTTA	ACGCTCTGTA	GGCTACTCCA	TTTGGAAAGGA	480
	AATCTCTCTC	ACCAGCTGCA	CCCCAGCAC	TTCTCCAGT	TCACATTTT	GGATTATTT	540
	AGACTCTCCA	CCATAGGCA	CCTCTACTTA	GCAGAGAA	TGGTTABAA	TCTTCTGCC	600
	AGCATGCTTC	GGACATGCC	GCTTCTGGAG	AATCTTFACT	TGCAGGGAAA	TCCGTGGACC	660
45	TGCGATTGTG	AGATGAGATG	GTITTTGGAA	TGGGATGCAA	AATCCAGAGG	AATCTGAAG	720
	TGTAAAAAGG	ACAAAGCTTA	TGAAGGCCGT	CAGTTGTGTG	CAATGTGCTT	CAGTCCAAAG	780
	AAGTTGTACA	AACATGAGAT	ACACAAGCTG	AAGBACATGA	CTTGTCTGAA	GCCTTCAATA	840
	GAGTCCCTCC	TGAGACAGAA	CAGGAGCAGG	AGTATTGAGG	AGGAGCAAGA	ACAGGAAGAG	900
50	GATGGTGGCA	CCCTAGCTCAT	CTTGGAGAAA	TTCCAACTGC	CCGAGTGGAG	CATCTCTTTG	960
	AATATGACCG	AGGAGCACCG	GAACATGGTG	AATCTGGTCT	GTGACATCAA	GAACCAATG	1020
	GATGTTTACA	AGATTCACTT	GAACCAACG	GATCCCTCCG	ATATTGACAT	AAATGCAACA	1080
	GTTCCTTGG	ACTTTGAGTG	TCCATGAC	CGAGAAACT	ATGAAAAGCT	ATGGAAATTG	1140
	ATAGCATACT	ACAGTGAAGT	TCCCGTGAAG	CTACACAGAG	AGCTCATGCT	CAGCAAGAGC	1200
55	CCAGAGGCTA	GCTACAGTA	CAGGCAGGAT	GCTGATGAGG	AAGCTCTTTA	CTACACAGT	1260
	GTGAGAGCCC	AGATTCTTGC	AGAACCAGAA	TGGGTATGTC	AGCCATCCAT	AGATATCCAG	1320
	CTGAACCGAC	CTCAGAGTAC	GGCCAGAGAG	GTGCTACTTT	CCTACTACAC	CCAGTATTCT	1380
	CAAACAATAT	CCACCAAGAA	TACAAAGCAG	GCTCGGGGCA	GAAGCTGGGT	AATGATTGAG	1440
	CCTAGTGGAG	CTGTGCAAG	AGATCAGACT	GCTCTGGAAG	GGGGTCCATG	CCAGTTGAGC	1500
60	TGCAACGTGA	AGCTTCTGA	GAGTCCATCT	ATCTTCTGGG	TGCTTCCAGA	TGGCTCCATC	1560
	CTGAAGCGC	CCATGGATGA	CCCAGACAGC	AAGTCTCCCA	TTCTCAGCAG	TGGCTGGCTG	1620
	AGGATCAAGT	CAATGGAGCC	ATCTGACTCA	GGCTGTATAC	AGTGCATTGC	TCAGTGGAG	1680
	GATGAAATGG	ACCGCATGGT	ATATAGGGTA	CTTGTGCAGT	CTCCTCCAC	TCAGCCAGCC	1740
	GAGAAAGACA	CAGTGCACAT	TGGCAAGAAC	CCAGGGGAGT	CGGTGACATT	GCCTTGCAAT	1800
65	GCCTTAGCAA	TACCCGAAGC	CCACCTTAGC	TGGATTCTTC	CAACACAGAG	GATAATTAAT	1860
	GATTTGCTA	ACACATCACA	TGTATACATG	TTGCCAAATG	GAACCTCTTC	CATCCCAAG	1920
	GTCCAGTCA	GTGATAGTGG	TTACTACAGA	TGTGTGCTG	TCAACAGCA	AGGGGCGAGC	1980
	CATTTTACGG	TGGGAATCAC	AGTGACCAAG	AAAGGGTCTG	GCTTGCCATC	CAAAAGAGGC	2040
	AGAGCCCCAG	GTGCAAGGC	TCTTTCCAGA	GTGAGAGAG	ACATCGTGG	GGATGAAGGG	2100
70	GGCTCGGGCA	TGGGAGATGA	AGAGAACACT	TCAGAGAGAC	TTCTGCATCC	AAAGGAACCA	2160
	GAGGTGTCC	TCAAAACAAA	GGATGATGCC	ATCANTGGAG	ACAGAGAAAGC	CAAGAAAGGG	2220
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	GAGCGCTGGG	CTGATATTTT	AGCCAAAGTC	CGTGGGAAAA	ATCTCCCTAA	GGGCACAGAA	2400
75	GTACCCCGGT	TGATTTAAAC	CACAAGTCTT	CCATCTCTGA	GGCTAGAGT	CACACCACT	2460
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	GCCAGCATGG	GGCTAGAAC	CAACCAAT	GGAGTTATTC	TGTTGAACC	TGAAGTAACA	2640
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80	ACTGAAGAG	ACCTGAAGGG	GACAGCAGCC	CCTACACTTA	TATCTGAGCC	TTATGAACCA	2760
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	GAGCCTCCAT	TGGATGCTGT	CTCCTTGGCT	GAGTCTGAGC	CCATGCAATA	CTTTGACCCA	2940
	GATTTGGAGA	CTAAGTCACA	ACCAGATGAG	GATAAGATGA	AAGAAGACAC	CTTTGCACAC	3000
	CTTACTCCAA	CCCCCACCAT	CTGGGTAAAT	GACTCCAGTA	CATCAGATT	ATTTGAGGAT	3060

	TCTACTATAG	GGGAACCCAGG	TGTCCCAGGC	CAATCACATC	TACAAGGACT	GACAGACAA	3120
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	AAAGAGATGT	CTCAGACACT	ACAGGGAGGA	AAATATGCTAG	AGGGAGACCC	CACACACTCC	3240
5	AGAAGTCTTG	AGAGTGAGGG	CCAGAGAGGC	AAATCCATCA	CTTTGCCCTGA	CTCCACACTG	3300
	GGTATAATGA	GCAGTATGTC	TCCAGTTAAG	AAGCCTGCGG	AAACCCACAGT	TGGTACCCCTC	3360
	CTAGACAAG	ACACCCACAC	AGTAACAACA	ACACCCAGGC	AAAAAGTTGC	TCCGTATCC	3420
	ACCATGAGCA	CTCACCCCTC	TCCAAGGAGA	CCCAACGCGA	GAAGGAGATT	ACGCCCCAAC	3480
	AAATTCCGCC	ACCGGCACAA	GCAAAACCCCA	CCCAACACTT	TGCCCCATC	AGAGACTTTT	3540
10	TCTACTCAAC	CAACTCAAGC	ACCTGACATT	AAGATTTCRA	GTCAAGTGA	GAGTTCTCTG	3600
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15	ACTGTTCTC	TGAAAACCTGA	GGGCOCTTAT	GATTCTTAG	ATTACATGAC	AACCACAGAA	3900
	AAAAATATAT	CATCTTACCC	TAAAGTCCAA	GAGACACTTC	CAGTCAACATA	TAAACCCACA	3960
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20	AATCCCTCAA	GCACTGCCCA	GCCTGGGAGG	CTACAGACAG	ACATACCTGT	TACCACTTCT	4200
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	ACAACTCTCT	CAAGCATAAA	AGTGGAGGTG	GCTTCAAGTC	AGGCAGAAAC	CACCAACCTT	4380
	GATCAAGATC	ATCTTGAAAC	CACGTGGGCT	ATCTCTCTTT	CTGAAACTAG	ACCAAGAAAT	4440
25	CACACCCCTA	CGACGCCCG	GATGAAGGAG	CCAGCATCTT	CGTCCCATC	CACAATTCTC	4500
	ATGTCTTTGG	GACAAACTAC	CACCACTAAG	CCAGCACTTC	CCAGTCCAG	AATATCTCAA	4560
	GCATCTAGAG	ATTCCAAGGA	AAATGTTTTC	TGAAATTATG	TGGGGAATCC	AGAAACAGAA	4620
	GCAACCCAG	TCCAACATGA	AGGAACACAG	CATATGTGAG	GCCCAATGA	ATTATCAACA	4680
	CCCTCTCTCG	ACCGGAGTGC	ATTTAACTTG	TCTACAAAGC	TGGAATTGGA	AAAGCAAGTA	4740
30	TTTGGTAGTA	GGAGCTACCG	ACGTGGCCCA	GATAGCCAAC	GCCAGGATGG	AAGAGTTTAT	4800
	GCCTCTCATC	AACCTACACG	AGTCCCTGCC	AAACCCATCC	TACCAACAGC	AACAGTGAGG	4860
	CTACTGAAA	TGTCACACA	AAGCGCTTCC	AGATACTTTC	TACTTCCCA	GTCACTCTGT	4920
	CACCTGACCA	ACAAACCGGA	AATAACTACA	TATCCTTCTG	GGGCTTGGCC	AGAGAACAAA	4980
	CAGTTTACAA	CTCCAGATAT	ATCAAGTACA	ACAATCTCTC	TCCCATTCGA	CATGTCCAAA	5040
35	CCAGCATTC	CTAGTAAAGT	TACTGACCGA	AGAACTGACC	AATTCAATGG	TACTTCCAAA	5100
	GTGTTTGGAA	ATAACAACTAT	CCCTGAGGCA	AGAAACCCAG	TTGGAAGGCC	TCCAGTCCCA	5160
	AGAATTCTCT	ATTATTCCAA	TGGAAGACTC	CCTTCTTTTA	CCAACAAGAC	TCTTTCTTTT	5220
	CCACAGTTGG	GAGTCAACCG	GAGACCCAG	ATACCCACTT	CTCCTGCCCC	AGTAATGAGA	5280
40	GAGAGAAAG	TTATTCCAGG	TTCTTACAA	AGGATACATT	CCCATAGCAC	CTTCCATCTG	5340
	GACTTTGGCC	CTCCTGGCAC	TCOGTTGTTG	CACACTCCGC	AGACCAACGG	ATCACCTTCA	5400
	ACTAACTTAC	AGAATATCCC	TATGTTCTCT	TCCACCCAGA	GTCTTATCTC	CTTTATAACA	5460
	TCTTCTTCTC	AGTCTCTCAG	AAGCTTCCAC	CAGAGCTACT	CAAAGTCTTT	TGCAGGAGCA	5520
	CCTCTGTCAT	CCAAATCTTG	GTCTCTTGGG	GAAAAGCCCC	AAATCTCTAC	CAAGTCCCCA	5580
45	CAGACTGTGT	CCCTCACCCG	TGAGACAGAG	ACTGTGTCTC	CCCTGTGAGG	AACAGGAAAA	5640
	CCAAAGCCCT	TGCTTACTTG	TCCAAAGGTT	TCCACAGGAG	CTCTTATGAC	TCCGAATACC	5700
	AGGATACAA	GGTTTGAGGT	TCTCAAGAAC	GGTACCTTAG	TGATACGGAA	GGTTCAAGTA	5760
50	CAGATCGAG	GCCAGTATAT	GTGCACCCGC	AGCAACCTGC	ACGGCTCGGA	CAGGATGCTG	5820
	GTCTTGCTTT	CGGTACCCGT	GCAGCAACCT	CAAACTCTAG	CTTCCCACTA	CCAGGACGTC	5880
	ACTGTCTTAC	TGGGAGACAC	CATTGCAATG	GAGTGTCTGG	CCAAAGGGAC	CCAGGCCCCC	5940
55	CAAAATTTCT	GGATTTCTCC	TGACAGGAGG	GTGTGGCAAA	CTGTGTCCTC	CGTGAGAGGC	6000
	CGCATCACCC	TGCAAGAAAA	CCGGACCCCT	TCCATCAAGG	AGGCGTCTCT	CTCAGACAGA	6060
	GGCTCTCTA	AGTGGCTGGC	CAGCAATGCA	CCCGGGGCGG	ACAGCCCTGC	CATCCGCTTG	6120
	CACTGTGGCG	CAGTCCGCC	CGTTATCTAC	CAGGAGAAAG	TGGAGAACAT	CTCGCTGCC	6180
	CCGGGGCTCA	GCATTTACAT	TCACTGCACT	GCCAGGCTG	CGCCCTGCCC	CAGCGTGGCC	6240
60	TGGGTGCTCG	GGGATCTGAC	CCCATGCGC	CCCTCGCAGT	TCTTCCACGG	GAACTTGTCT	6300
	GTTTTCCCCA	ACGGGACGCT	CTACATCCGC	AACCTCGCGC	CCAAGGACAG	CGGGGCTATG	6360
	GAGTGGCTGG	CCGCTAAACT	GGTAGGCTCC	GCGGCGAGGA	CGGTGCACTG	GAACTGTCAG	6420
	CGTGACGAG	CCACGCGCG	CATCACGGGC	ACCTCCCGGC	GGAGGACGGA	CGTCAGGTAC	6480
	GGAGGAACCC	TCAAGCTGGA	CTGCAGCGCC	TGGGGGAGCC	CTGCGCGCG	CATCTCTTGG	6540
65	AGGCTGCCGT	CCAGAGGAT	GATCGACGCG	CTCTTCAATT	TGATAGCAG	AATCAAGGTC	6600
	TTTGCCAATG	GGACCTCTGT	GGTGAATCA	GTGACGAGCA	AAGATGCGCG	AGATTACCTG	6660
	TGCTGTAGCT	GAATTAAGGT	TGTTGATGAC	TACGTGCTGC	TCAAGTGGGA	TGTGTTGATG	6720
	AAACCGGCCA	AGATTGAACA	CAAGGAGGAG	AACGACCCCA	AAGTCTTCTA	CGGGGGTGAC	6780
	CTGAAGATGG	ACTGTGTGGC	CACCGGGCTT	CCCAATCCCG	AGATCTCTCT	GAGCTTCCCA	6840
70	GACGGGAGTC	TGGTGAATCT	CTTCATGCA	TCCGATGACA	GCGGTGGAGC	CACCAAGGCG	6900
	TATGTCTCTC	TCAATATGGA	GACACTCTAC	TTTAAAGGAG	TGGGATGAG	GGAGGAAGGA	6960
	GACTACACCT	GCTTTGCTGA	AAATCAGGTC	GGGAAGGACG	AGATGAGAGT	CAGAGTCAAG	7020
	GTGGTGACAG	CGCCCGCCAC	CATCCGGAAC	AAGACTTACT	TGGCGGTTCA	GGTGCCCTAT	7080
	GGAGACGTGG	TCACTGTAGC	CTGTGAGGCG	AAAGGAGAAC	CCATGCCCAA	GGTGACTTGG	7140
75	TTGTCCCAAA	CCAAACAGGT	GATCCGCCAC	TCTCTGAGA	AGTATCAGAT	ATACCAAGAT	7200
	GGCACTCTCC	TTATTAGAA	AGCCAGCGT	TCTGACAGCG	GCACTACAC	CTGCCCTGGT	7260
	AGGAACAGCG	CGGGAGAGGA	TAGGAAGAGC	GTGTGGAATC	AGTCAACCT	CCAGCCACCC	7320
	AAGATCAAGC	GTAAACCCAA	CCCCATCACC	ACCGTGCGGG	AGATAGCAGC	CGGGGGCAGT	7380
	CGGAACAGTA	TGACTGCAA	AGCTGAGGCG	ATCCCCACCC	CGAGGGTGT	ATGGCTTTT	7440
80	CCGAGGGTGG	TGGTCTTGCC	AGCTCCATAC	TATGGAAACC	GGATCACTGT	CCATGGCAAC	7500
	GGTTCCCTGG	ACATCAGGAG	TTTGAGGAAG	AGCGACTCCG	TCCAGCTGGT	ATGCTATGGA	7560
	CGCAACAGGG	GAGGGGAGGC	GAGGTTGATC	GTGCAGCTCA	CTGTCTGGA	GCCCATGGAG	7620
	AAACCCATCT	TCCACGACCC	GATCAGCAG	AAGATCAAGC	CCATGGCGGG	CCACACCATC	7680
	AGCCTCAACT	GCTCTGCGCG	GGGACCCCG	ACACCCAGCC	TGGTGTGGGT	CCTTCCCAAT	7740
	GGCACCGATC	TGCAGAGTGG	ACAGCAGCTG	CAGCGCTTCT	ACCACAAGGC	TGACCGCATG	7800
	CTACACATTA	CGCGTCTCTC	CTCGGTGAGC	GCTGGGGCCT	ACCGCTGCGT	GGCCCGCAAT	7860
	GCGCTTGGCC	ACACGAGAGG	GCTGGTCTCC	CTGAAGGTGG	GACTGAAGCC	AGAAGCAAC	7920
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	CCTCCCGGGG	CTGGGCGAGG	ACGTTTCTCC	TGGAGCTGCC	CCATGGGAT	GCATCTGGAG	8040
	GGCCGCCAAA	CCCTGGGACG	CGTTTCTCTT	CTGGACAATG	GCACCTCAC	GGTTCGTGAG	8100

	GCCTCGGTGT	TTGACAGGGG	TACCTATGTA	TGCAGGATGG	AGACGGAGTA	CGGCCCTTCG	8160
	GTCAACAGCA	TCCCGTGTAT	TGTGATCGCC	TATCCTCCCC	GGATCACCAG	CGAGCCCAAC	8220
	CCGGTCATCT	ACACCCGGCC	CGGGAACACC	GTGAACTGA	ACTGCATGGC	TATGGGGATT	8280
5	CCCAAAGCTG	ACATCACCTG	GGAGTTACCG	GATAAGTCGC	ATCTGAAGGC	AGGGGTTCAg	8340
	GCTCGTCTGT	ATGGAACAG	ATTTCCTTAC	CCCCAGGGAT	CACCTGACCAT	CCAGCATGCC	8400
	ACACAGAGAG	ATGCCGGCTT	CTACAAGTGC	ATGCCAAAA	ACATTCTCGG	CAGTGACTCC	8460
	AAAACAACTT	ACATCCACGT	CTTCGAAAT	GTGGATTCCA	GAATGATTGC	TTAGGAACCTG	8520
	ACAACAAAGC	GGGGTTTGTA	AGGGAAGCCA	GGTTGGGGAA	TAGGAGCTCT	TAAATAATGT	8580
10	GTCAAGTGC	ATGGTGGCCT	CTGGTGGGTT	TCAAGTTGAG	GTGATCTTG	ATCTACAATT	8640
	GTTGGGAARA	GGAGCAATG	CAGACACGAG	AAGGAGGGCT	CAGCCTTGCT	GAGACACTTT	8700
	CTTTTGTGTT	TACATCATGC	CAGGGGCTTC	ATTCAAGGGT	TCTGTGCTCT	GACTGCAATT	8760
	TTTCTTCTTT	AGCAATGCT	ACTCGACTGC	CTTCATAAGC	GTCCATAGGA	TATCTGAGGA	8820
	ACATTTCATCA	AAAATAAGCC	ATAGACATGA	ACAACACCTC	ACTACCCCAT	TGAAGACGCA	8880
15	TCACCTAGTT	AACCTGCTGC	AGTTTTTACA	TGATAGACTT	TGTTCCAGAT	TGACAAGTCA	8940
	TCITTCAGTT	ATTTCCTCTG	TCACCTCAAA	ACTCCAGCTT	GCCCAATAAG	GATTTAGAAC	9000
	CAGAGTGACT	GATATATATA	TATATATTTT	AAATCAGAGT	TACATACATA	CAGCTACCAT	9060
	TTTATATGAA	AAAAGAAAAA	CATTTCTTCC	TGGAACCTAC	TTTTTATATA	ATGTTTTATA	9120
	TATATATTTT	TTCCCTTCAA	ATCAGACGAT	GAGACTAGAA	GGAGAATAC	TTTCNGTCTT	9180
20	ATTAAAAATTA	ATAAATTATT	GCTCTTTACA	AGACTTGGAT	ACATTACAGC	AGACATGGAA	9240
	ATATAATTTT	AAAAAATTTT	TCTCCAACTT	CTTFCAAATT	CAGTCACCAAC	TGTTATATTA	9300
	CCCTCTCCAG	GAACCTTCCA	GTGGGGAAGG	CTGCGATATT	AGATTTCCTT	GTATGCAAGG	9360
	TTTTTGTGTA	AAGCTGTGCT	CAGAGGAGGT	GAGAGGAGAG	GAAGGAGAAA	AAGTCATCAT	9420
	AACCTTACAG	AATTGAATCT	AGAGTCTTCC	CGAAAAAGCC	CAGAACTTTC	TCTGCAGTAT	9480
25	CTGGCTGTGC	CACTGCTCT	AAGGTGGCTG	CTTCTTCCCC	AGCCATGAGT	CAGTTTGTGC	9540
	CCATGAATAA	TACACGACCT	GTTATTTCCA	TGACTGCTTT	ACTGTATTTT	TAAAGTCAAT	9600
	ATACTGTACA	TTTGATAATA	AAATAATATT	CTCCCAAAAA	AAAAA		9645

Seq ID NO: C12 DNA Sequence
Nucleic Acid Accession #: AK001903
Coding sequence: none

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	GTACCGGAAC	GTACAGAAAC	AGTGTGAGAA	ATTAAAGTCT	GGTTCACTGC	GCAGTAGCAA	180
	AGATGGTCAA	GGCCATGGAA	AAAGCAGAAA	TTTACCAAGA	AAGCTGATAC	CCATGTATAG	240
40	TTCCCACTCA	TCFCAATATC	ATCTGCTATC	TTTTTAAAGT	AAGTCCTAGA	CATATCGGGG	300
	ATAACATGGG	GGTGTATTAG	TGACCACAGT	TATCAGAAGC	AGAGAAATGT	AATTCCATAT	360
	TTTATTGAAA	ACTTATTCCA	TATTTTAAAT	GGATATTGAG	TGATTGGGTT	ATCAAAACACC	420
	CACAAACTTT	AATTTTGTGA	AATTTTATATG	GCTTTGAAAT	AGAAGTATAA	GTTGCTACCA	480
	TTTTTTGATA	ACATTGAAAG	ATAGTATTTT	ACCATCTTTA	ATCATCTTGG	AAAAACAAAG	540
45	TCTGTGGAAC	AACCACTCTT	TCACCTAGCA	GCATGAGGCC	AAAGTAAAG	GCTTTAAATTT	600
	ATAACATATG	GGATCTTTAG	TAGTATGTTT	TTTTCTTGAA	ACTTCAGTGGC	TCTATCTAAC	660
	CTTACTATCT	CCCTACTCTT	TCTCTAAGAC	TAAACTCTAG	GCTCTTAAAA	ATCTGCCCCAC	720
	ACCAATCTTA	GAAGCTTTTG	AAAGAAATTG	TCCTTAAATA	TCCTTTAATA	GTAACATGTA	780
	TTTTATGGAC	CAAATTGACA	TTTTGAGCTA	TTTTTTCCAA	AAAAGTCAGG	TGAATTTTCAg	840
50	CACACTGAGT	TGGGAATTTC	TTATCCCAAG	AGACCAACCA	ATTTCAATTT	TATTTAAGAT	900
	TGATTCCATA	CTCCGTTTTT	AAGGAGAATC	CCTGCAGTCT	CCTTAAAGGT	AGAACAAATA	960
	CTTTCTATTT	TTTTTTTTCAC	CATTGTGGGA	TTGGAATTTA	AGAGGTGACT	CTAAAAAAAC	1020
	AGAGAACAAT	TATTTCTCAG	TTGTATTAAg	CACGGACCCA	TATTTATCAT	TTCACTTAAA	1080
	AAAATGATTT	CTGTGCAACC	TTTTGGCAAC	TTCTCTTTTC	AATGTAGGGA	AAAACCTAGT	1140
55	CACCTCGAAA	ACCCCAAAAA	TAAATAAAAC	TTGTAGATGT	GGGCAGAAAG	TTTGGGGGTG	1200
	GACATTGTAT	GTGTTTAAAT	TAAACCTGT	ATCACTGAGA	AGCTGTGTGA	TGGGTGAGAG	1260
	AAAATGAATG	CTTAGAAGCT	GTTTCATCTT	TCAAGAGCAG	AAGCAAAACA	CATGCTCTCAG	1320
	CTATATTATT	ATTTATTTT	TATGCAATAA	GIGAATCAAT	TCCTCTGTAT	TAAITTCCAA	1380
	AGGGTTTATC	CCCTTATTTA	AATGCTTTGA	AAAACAGTGC	ATTGCAATG	GGTTGATATT	1440
60	TTTTCTTAAA	AGAAAATAT	AATTATGAAA	GCCAAAGATA	TCGAAAGCCT	GTTTTATTTT	1500
	AAAACTTTTT	ATGTTCTGTG	GTTGAAGTTG	TTTGTTTGTT	TGTTTCTATT	TTGTTGGTTT	1560
	TTTACTTGT	TTTTTGTTTT	GTTTTGTTTT	GTTTTGCATA	CTACATGCAg	TTCTTTAAOC	1620
	AATGTCTGTT	TGGCTAATGT	AATTAAAGTT	GTTAATTAT	ATGAGTGCAAT	TTCAACTATG	1680
	TCAATGGTTT	CTTAATATTT	ATTGTGTAGA	AGTACTGGTA	ATTTTTTTAT	TTACAATATG	1740
65	TTTAAAGAGA	TACAGTTTG	ATATGTTTTC	ATGTTTAT	AGCAGAAATT	ATTTATTTCT	1800
	ATGGCATTC	AGCGATATT	TTGGTGTG	CGAGGCATGC	AGTCAATATT	TGTACAGTT	1860
	AGTGGACAGT	ATTACGCAAC	GCCTGATAGC	TTCTTTGGCC	TTATGTTAAA	TAAAAAGACC	1920
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Seq ID NO: C13 Protein Sequence
Nucleic Acid Accession #: Ros sequence
Coding sequence: 1..5001

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	CAGTCTGTGC	TTGTGCTCTG	GGTGGATCCT	GTTCTGGAAA	AACAGAAAGAA	AGTGTGTGCA	180
80	TCAAGACAGT	ACACCGTGGC	CTATCGAGAG	AAGCGGGGAT	TGGCCAGGTC	GGATTATAGG	240
	CAGATCGCTA	ACAGGCGGTGT	GCTGATTTAG	AACCTGATTC	CAGACACTGT	GTATGAATTT	300
	GCAGTCCGTA	TTTCACAGGG	TGAAAGAGAT	GGCAAAATGGA	GTACGTTCAGT	CTTCCAAACA	360
	ACACCAAGAT	TGCCCCCTAC	CACAGCTCCT	GAAAACCTGA	ACGTCTGGCC	AGTCAATGGC	420
	AAACCTACAG	TTGTGCTGTC	ATCTTGGGAT	GCGCTACCAg	AGACTGAGGG	GAAAGTGAAA	480
	GTCGTCTGTC	TGACACAGG	ACTGTTTCA	GTTTCTCTCT	TCCAACATCA	TGCCAATCA	540

	TTTCAGAATA	CATTCTTTCA	TACGCCCCGG	CTCTCAAACC	ATTGGAGCA	AAGTCCCTCA	600
	CCTATCTTGG	AGACACTACT	TCTGCCCTGG	TGGATGGTCT	GCAGCCTGGG	GAACGCTATC	660
	TTTTCAAAT	CCGGGGCACA	AACAGGAGAG	GCCTGGGACC	TCACTCCAAA	GCCTTCATTG	720
5	TCGCTATGCC	AACAAGAATG	CAGCTGTACC	CAGAAGGATT	TCAGTTGTCT	AGCTTACCTG	780
	ATCGATATCC	AAACCAACA	AGTTAATAAA	GATCCACAAC	TGGAGGGGAG	TGTTTTTGA	840
	CCATGTTTTC	TTTTCTACTT	CCTCACAATT	ATGCTGGATA	TTGGCGGCTT	TTCCTTCATT	900
	ATGTGCTATG	AAGACCCANN	TGTTTCTTCT	TTGACAGGCA	ATTCTTTAAA	ATCTGTTGCA	960
	GCCAGTAAGG	CGGATGTTCA	GCAGAACACG	GAGGACAATG	GGAAACCCGA	AAAACTGAG	1020
10	CCTTCCTCAC	CTTCTCCGAG	AGCTCCAGCT	TCCTCCCAAC	ACCCCTCTGT	GCCTGCTTCT	1080
	CCCCAAGGGA	GAAATGCCAA	GGACCTTCTT	CTTGACTTGA	AGAACAAAAT	ATTGGCTAAT	1140
	GGTGGGGCGC	CCCCAAAACC	CCAGCTTCGC	GCCAAGAAAG	CAGAGGAGCT	GGATCTTCAG	1200
	TCGACAGAAA	TCACITGGGA	GGAGGAGCTG	GGTTCCCGGG	AGGACTCGCC	CATGTCAACC	1260
	TCAGACACCC	AAGACCAGAA	AOGGACCCTG	AGGCGCGCAA	GTAGACACGG	CCACTCGGTG	1320
15	GTGTGCTCCG	GCAGGACTGC	AGTGAGGGCC	CGGATGCCAG	CGCTGCCCGG	AAGGGAAGGC	1380
	GTAGATAAGC	CTGGCTTTTC	CCTGGCCACG	CGGCCCGGCC	CAGGGGCGCC	CCCTCGGCT	1440
	TCGGCCCTTC	CTGCCACCA	CGCTTCACCC	CAGGCGACCT	CTCATGCTCC	TTCCTGCTCT	1500
	GCCAGCTTGA	ATTACACAGA	CTTGGTGGAC	TCAGACGAAG	ATGAGCAGCG	TGTGGGCTCC	1560
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20	CGTCCAGAG	TTCCTCCGGA	CAGAAGCTCT	GTGCACCCCG	CGCAAAAGCC	AGCCTCGCCG	1680
	GCSCGGAGGA	CCCCCATTC	AGGGGCGCCA	GAGGAAGATT	CCAGTGCTTC	AGCCCCACCC	1740
	TCAAGACTTT	CTCCACCCCA	TGGGGGATCA	TCTCGGCTGC	TGCCACCCCA	GCCACACCTG	1800
	AGCTCTCCAC	TTTCCAGAGG	CGGGAAGGAT	GGTGAGGACG	CCCCAGCCAC	CAACTCCAAAT	1860
	GGGCCATCAC	GGTCCACCAT	GTCTCTCTCC	GTCTCTCTCC	ATCTCTCTCT	CAGGAAGCAG	1920
25	GTCTCTGAGG	AGGCTGAGGC	TTCGTATGGT	GAAAGCCACG	GTGACGGCGA	TAGGGAAGAG	1980
	GGCGGAGGGC	AGGCGGAGGC	CACGGCCGAG	ACGCTGCGGG	CCCGGCTCTG	CTCTGACAC	2040
	TTCATTTTGC	TCAGACACAA	ACCCCTTGCT	GCCAAAGGGA	GGTCTCCAAG	CAGGTTGAGC	2100
	ATTGGGCGGG	GACCTCGGCT	GCAGCCCTCC	AGCTCCCCAC	AGTCGACTGT	GCCTCCCGGA	2160
	GCCCAACCCCA	GGGTTCCTCT	TCACCTCTGAT	TCCCAACCTA	AGCTTAGCTC	AGGTATCCAT	2220
30	GGAGACAGAG	AGGATGAGAA	GCCTCTCTCT	GCCACGTTTG	TCAATGACCA	CGTGCTCTCC	2280
	TCTTCAGGGC	AGCCCATCTC	CGGGGCTGG	GAGGACTTAA	GGAGAAGCCC	GCAGAGAGGG	2340
	GCCAGCCTGC	ATCGGAAGGA	ACCCATCCCA	GAGAACCCCA	AATCCACAGG	GGCAGATACA	2400
	CATCTCTAGG	GCAGTACTCT	CTCCCTGGCC	TCCAGGCTC	AGGATGTTCA	ACAGAGCACA	2460
	GACCGCGACA	CGGAGGCTCA	TTCCTCCAAA	GCACAGCCAG	GGTCCACAGA	CGCCACCGCG	2520
35	TCCCTCTGCT	GTCTCTCCCG	AGCAOGGTCA	CAGCAGCATC	CCAGTGTCTC	CAGAAGGATG	2580
	ACACCCGGCC	GGGCCCCAGA	ACAGCAGCCC	CCTCTCTCCG	TGCCCACTGC	CCAGCACCAC	2640
	CGGGACCCCC	AGAGCAGAGA	CGCGGCTCGG	TCACCTTCCC	AGCCCAAGGT	CTCACTGACC	2700
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	ACGCGGAGCT	CCGAGGAGAT	GCTCCCCACG	GCCCTCCAGA	ACCAGGACBA	GGATGCCGAG	2820
40	GGCAGCTACG	ACGACGACAG	CACAGAAGTC	GAGGCCGAGG	ATGTGCGGGC	CCCCGCGCAC	2880
	GCCGCGCGCG	CCAGGAGGCG	AGCTGGCTCC	CTTCCCAAGC	ACCAGCAGGT	GGAGTCTCCC	2940
	ACAGGCGCAG	GCGCAGGTGG	CGACCAAGG	TCCAGCGCGG	GACATGCGGC	CTCCCGCGCC	3000
	AGGCCAGGCC	GGCCCGCGCG	CCCCAGTCC	CGCGCCCGGG	TCCCAAGCAG	GGCAGCGCGC	3060
45	GGGAAGTCCG	AGCCTCTCTC	CAGCGCGCCC	CTGTCTCCCA	AGTCCAGCAG	GTCCGTCTCA	3120
	GCCGAGGAGG	AGGAGGAGGA	GGACGCGGGG	TTTTTTTAAAG	CGCGGAAGGA	AGACCTTCTG	3180
	TCTTCTCTCT	TGCCAAAGTG	GGCCTCTTCC	TCCACTCCCA	GGGGCGGCAA	AGACCTCCGAT	3240
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50	CTGGCTCTCT	TGAAGCGAAC	TCTTCCCCCA	CCTCCAGGCA	GCTCCCCCAG	GGCTCTCCAC	3360
	GTCCCTTCCC	GACCGCGCGC	TGCGAGCGCT	GCCACCTGTA	GGCCCGTCTC	GGGCAACCCAC	3420
	CCCTGGCGCG	ACGACGACAC	GCGCGCCCCV	CCTGGCCACT	TCTCCACCA	CCCGATGCTG	3480
	TCTTGGCGCC	AGAGGATGAT	GCATGCCAGA	TTCGCTAAC	CTCTCTCCCG	ACAGCCTGCC	3540
55	AGACCTCTCT	ACAGACAGAG	TTATATATGC	AGACCAATG	TAGAAGGGAA	AGTCTTCTCT	3600
	GGTAGTAAAG	GAAGACCGAA	TGGACAGAGA	ATTATCAATG	GCCTTCAGAG	AACAAAGTGG	3660
	GTGTGAGGAC	TTGATCTGAG	GTATGATATG	AATGACAGAG	GAAGGTACCT	CCAAGATTCA	3720
	CATGGAATAT	CTCTCTGGAT	TAAACTAGGA	GGAGATGGTC	GAACCATTTG	AGATCTGGA	3780
	GGGACCCCGG	TGGTAGGTCC	TGACGGCTTC	CCACTCTTTG	GGCAGGGGCG	ACATGGCACA	3840
60	CCTCTGGCCA	ATGCCCAAGA	TAAAGCAATT	TTGAGTCTTG	GAGGAAGGCC	GCTGGTGGGC	3900
	TTGGAGGTCA	TCAAAAAAAC	CACCCATCCC	CCTACCACTA	CCATGAGGCC	CACCACTACT	3960
	ACGACGCCCC	TGCCCTACCC	TACAAACCCG	AGGCCACCCA	CTGCCACCA	CATGCAAGCC	4020
	ACCACTACTA	CBACGCCCCC	GCCTAOCAC	ACACCGAGGC	CCACCACTGC	CACCAACCGC	4080
65	CGCAGACCA	CCAGGCGTCC	AACAAACCA	GTCCGAACCA	CTACGCGGAC	AACCAACACC	4140
	ACCAACCCCA	AACCAACACC	TCCCATCCCC	ACCTGTCCCC	CTGGGACCTT	GGAGCGGCAC	4200
	GACGATGATG	GCAACCTGAT	AATGAGCTCC	AATGGGATCC	CAGAGTGCTA	CGCTGAAGAA	4260
	GATGAGTTCT	CAGGCTTGGA	GACTGACACT	GCAGTAACCTA	CGGAAGAGGC	CTACGTTATA	4320
70	TATGATGAAG	ATTATGAATT	TGAGACGTCA	AGGCCACCAA	CCACCACTGA	GCCTTCGACC	4380
	ACTGCTACCA	CACCGAGGGT	GATCCACAGG	GAAGCGGCCA	TCAGTTCTCT	TCTGAAGAAA	4440
	GAAATTGATC	TGGCTGGAAG	GAAACGATTT	GTGTCTCTTT	ACGTGACGTA	CCTAAATAAA	4500
	GACCCATCAG	CCCGTGTCTC	TCTGACTGAT	GCAGTGGATC	ACTTCCAGGT	GGACAGCCTG	4560
	GATGAATACA	TCCCAATGTA	CCTGAAGGAG	AGTGTATCTG	CTCCCGAGCA	TGCTCCCGCG	4620
75	AACATCACCG	TGGTGGCCGT	GGAGGTTTGC	CACCTCAITTG	TCATTGTGGA	TTGGGACAAA	4680
	GCCACCCGAG	GAGATTGTGT	CACAGGTTAT	TTGGTTTACA	GTGCATCCCTA	TGAAGATTTC	4740
	ATCAGGAACA	AGTTTTCAC	TCAAGCTTCA	TCAAGTAACCT	ACTTGGCCAT	TGAGAACCTA	4800
	AAGCCCAACA	CGAGGTATTA	TTTTAAGTGG	CAAGCACAAA	ATCCTCATGG	CTACGGACCT	4860
	ATCAGCCCTT	CGGTCTCAT	TGTACCGGAA	TCAGATAATC	CTCTGCTTGT	TGTGAGGCGC	4920
80	CCAGGCGTCA	AGGCTCTGCG	ATCCCATTCG	CTTTCAAAACA	TGATCCGAGC	TACACGACT	4980
	GCCATGGACG	GCAATATGTG	AAGCGCACGT	GGTATCGAAA	GTTCCTGGGA	GTGTCTCTTT	5040
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	TTGGAGACAG	CTGGGGGAAG	GGTGAAGACC	ATTGCCAATT	TGTGGATTCA	CACCTTGATG	5160
	GAGGAACAGG	GCTTCAGTTC	TATGTAGAAG	CCCTCCCTAC	TATTCAAGGC	TACTATCGCC	5220
	AGTATCGTCA	GGAGCTGTGC	AGGTTTGGGA	ACATCGGCTT	CGGAACCCCC	TACTACTATG	5280
	TGGGCTGGTA	CGAGTGTGGG	GTCTCCATCC	CTGGAAAGTG	GTAAATCACAG	GACCGTCAATG	5340
	CTGCAAGCTT	GGCTTGCCCA	GCCTCACCAA	CTAAGTCCGA	CTAGGGGCTG	TGAGCAAGAA	5400
	CAGCCAGCAT	GCTCAGCCCC	GCTGCCCTAG	GTGCCAGGAA	GGTCACAGAT	GGACACTGGC	5460
	CATTCTGTGC	ATCTCAGTCT	GGAACCTAGT	CCCACTTCTT	GGCCTGGACA	ATGAACAGGA	5520
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CCAGAGACAT CAGAAACCA CAACTGATTC AGTGTGATT CCCAGACITT TTAGGCATGA 5640
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AAAAAA 6007

Seq ID NO: C14 DNA Sequence
Nucleic Acid Accession #: NM_003014
Coding sequence: 238..1278

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1 11 21 31 41 51
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GGCCCTGGCG AGGCGGTGGC CATCCCTATG TGCCTGCACA TGCCCTGGAA CATCAAGCGG 360
ATGCCCAACC ACCTGACACA CAGCACGCAG GAGAACGCCA TCCTGGCCAT CGAGCAGTAC 420
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TGTGTTTTTT TACCAATGAC TTCAGTTTCT GTTTTATGCT AGAACTTAA AAACAAAAT 1920
AATAATAAAG AAAATAAAT AAAAGGAGA GGCAGACAA GTCTGGATTC CTGTTTTTG 1980
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Seq ID NO: C15 DNA Sequence
Nucleic Acid Accession #: NM_005940
Coding sequence: 23..1489

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AGCCCTGCCC AGTAGCCCG CACCTGCCCC TGCCACGCG GAGCCCCCC GGCCTGCCAG 240
CAGCCTCAGG CCTCCCCCT GTGGCGTGCC CGACCATCT GATGGGCTGA GTGCCGCAA 300
CGACAGAGG AGGTTCTGTC TTCTTGCGG GCGCTGGAG AAGACGGACC TCACCTACAG 360
GATCCTTGG TTCCCATGCG AGTTGGTGCA GAGCAGGTG CGGCAGACGA TGGCAGAGG 420
CCTAAGGTA TGGAGCGATG TGACGCCACT CACCTTACT GAGGTGCAAG AGGCGCGTGC 480
TGACATCATG ATGACATTC CAGGTACG GCATGGGAC GACCTGCCGT TTGATGGGCC 540
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CGACTATGAT GAGACCTGGA CTATCGGGGA TGACAGGGC ACAGACCTGC TGCAGGTGGC 660
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TCAACACCTA TATGGCCAG CCTGGCCAC TGTCACTCC AGGACCCGAG CCTTGGGCC 840
CCAGGCTGG ATAGACACA ATGAGATTGC ACOCCTGGAG CCAGACGCC CTCCAGATGC 900

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CCTCTACTGG AAGTTTGACC CTGTGAAGGT GAAGGCTCTG GAAGGCTTCC CCGTCTCGT 1440
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Seq ID NO: C16 DNA Sequence
 Nucleic Acid Accession #: NM_024022
 Coding sequence: 202..1563

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CAGCTCTTGC CAGATGACAA GGTGACTGCA TTACACCACT CAGTATATGT GAGGGAGGGA 780
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Seq ID NO: C17 DNA Sequence
 Nucleic Acid Accession #: NM_003220
 Coding sequence: 63..1376

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GCACCAAGCA CGGACGGGCA CGGTGCCCC AGCTGGGCAC TGTAGGTCAA TCTCCCTCA 180
CGAGCGCCCC GCGGCTGTCC CACACCCCA ATGCCGACTT CCAGCCCCA TACTTCCCTC 240
CACCTATCCA GCTATCTAC CCCCAGTCC AAGATCTTAA CTCCCAAGTC AACGACCCCT 300
  
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5	ACAGCCTGAA	CCCCCTGCAC	GCCGAGCCBC	AGCCGACGCA	CCCAGGCTGG	CCCGGCCAGA	360
	GGCAGAGCCA	GGAGTCTGGG	CTCCTGCACA	CGCACCGGGG	GCTGCCTCAC	CAGCTGTGGG	420
	GCCTGGATCC	TGCGAGGGAC	TACAGGCGGC	ACGAGGACCT	CCTGCACGGC	CCACACGGCC	480
	TCAGCTCAGG	ACTCGGAGAC	CTCTCGATCC	ACTCCTTACC	TCAGGCCATC	GAGGAGGTCC	540
	CGCATGTAGA	AGACCCGGGT	ATTAACATCC	CAGATCAAAC	TGTATTTAAG	AAAGGCCCCG	600
	TGTCCTGTGC	CAAGTCCAA	AGCAATGCCG	TCTCCGCCAT	CCCTATTAA	AAGGACAAAC	660
	TCTTGGCGG	CGTGGTGAAC	CCCAACGAAG	TCTTCTGTTC	AGTTCCGGGT	CGCCTCTCC	720
	TCTCAGCTC	CACCTCGAAG	TACAAGGTCA	CGGTGGCGGA	AGTGCAGCGG	CGCTCTCAC	780
10	CACCCAGTGT	TCTCAACGCG	TGCTGTCTGG	GCGGAGTGCT	CCGAGGGCGG	AAGTCTAAAA	840
	ATGGAGGAAG	ATCTTTAAGA	GAAAACTGG	ACAAAATAGG	ATTAATCTTG	CCTGCAGGGA	900
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	TAGCCAGGGA	CTTTGGGTAC	GTGTGCCAAA	CCGAATTTCC	TGCCAAGCA	GTAGCTGAAT	1020
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15	CTACAAAACA	GATATGCAAA	GAGTTCACCG	ACCTGTCTGG	TCAGGACCGA	TCTCCCTTGG	1140
	GGAATCTACG	GCCCAACCCC	ATCTGTGAGC	CGGCGATCCA	GAGCTGCTTG	ACCCACTTCA	1200
	ACCTCATCTC	CCACGGCTTC	GGCAGCCCCG	CGGTGTGTGC	CGCGGTACAG	GCCCTGCGGA	1260
	ACTATCTCAC	CGAGGCCCTC	AAGGCCATGG	ACAAAATGTA	CCTCAGCAAC	AAOCCCAACA	1320
	GCCACACGGA	CAACAACGCC	AAAGCAGTGG	ACAAAGAGGA	GAAGCACAGA	AAGTGAGGCT	1380
20	CTCTCCCGC	CCCGCCCTTC	CCAGCCCTCA	CCAGCCCCCG	GCGCGCCCA	CCTCCGCGCG	1440
	GTACACGCTC	CGGGATCAGC	AACCTTCTCT	GCTGCTGCTA	CTGCTGCTGC	TGCTGCCGCC	1500
	GCGGCCGCGG	CGCTGCGCCT	TGGGTCCCCC	CGAGTCTCCG	GGACTGCCCT	CTGACTGTCT	1560
	AGTGGGCGAG	CCTCTCGGAC	TCTGCACCCG	CCTCGACCTC	CCACCCGCT	CCACACCCCC	1620
	TGTGCCCCCG	GAATTC					1636

Seq ID NO: C18 DNA Sequence
Nucleic Acid Accession #: NM_002988
Coding sequence: 71..340

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	CTGCTCCTGT	GCAACAAGTTG	GTACCAACAA	AGAGCTCTGC	TGCTCTGCTT	ATACCTCTCT	180
35	GCAGATTCCA	CAAAAGTTCA	TAGTTGACTA	TTCTGAAACC	AGCCCCAGT	GCCCCAAGCC	240
	AGGTGTCTATC	CTCCCAACCA	AGAGAGGCGG	GCAGATCTGT	GCTGACCCCA	ATAGGAABTG	300
	GGTCCGAAA	TACATCAGCG	ACCTGAAGCT	GAATGCTCGA	GGGGCCTGGA	AGCTGCGAGG	360
	GCCCACTGAA	CTTGGTGGGC	CCAGGAGGGA	ACAGGAGCCT	GAGCCAGGGC	AATGGCCCTG	420
	CCACCCCTGA	GGCCACCTCT	TCTAAGAGTC	CCATCTGCTA	TGCCAGGACA	CATTAACTAA	480
40	CTTTAATCTT	AGTTTATGCA	TCAATTTCA	TTTGTAAAT	GATTCTTATT	GTGAGCTGCT	540
	ATTATGAAT	TAGTATTTTC	TCTGACATCT	CATGACATTC	TCTTTATCAT	CCTTTCCCTT	600
	TTCCCTTCAA	CCTCTGGTAC	ATTCAATGCA	TGGATCAATC	AGTGTGATTA	GCTTTCTCAG	660
	CAGACATTGT	GCCATATGTA	TCAATGACA	AATCTTTATT	GAATGGTTT	GCTCAGCACC	720
	ACCTTTTAAT	ATATTGGCAG	TACTTATAT	ATAAAGGTA	AACAGCATT	CTCACTGTGA	780
45	AAAAA	AAAAA	AAA				803

Seq ID NO: C19 DNA Sequence
Nucleic Acid Accession #: NM_004063
Coding sequence: 121..2619

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55	ATGATACTTC	AGGCCCATCT	TCACTCCCTG	TGCTCTCTTA	TGCTTTATTT	GGCAACTGGA	180
	TATGGCCAGG	AGGGGAAGTT	TAGTGGACCC	CTGAAACCCA	TGACATTTTC	TATTTATGAA	240
	GGCCAGAAC	CGAGTCAAT	TATATTCCCG	TTTAAGGCCA	ATCCTCCTGC	TGTGACTTTT	300
	GAATCACTG	GGGAGACAGA	CAACATATTT	GTGATAGAAC	GGGAGGAGCT	TCTGTATTAC	360
	AACAGAGCCT	TGGACAGGGA	AACAAGATCT	ACTCACAATC	TCCAGGTTCG	AGCCCTGGAC	420
60	GCTAATGGAA	TGTATAGTGA	GGGTCCAGTC	OCTATCACC	TAGAAGTGAA	GGACATCAAC	480
	GACATTCGAC	CCACGTTTCT	CCAGTCAAGG	TACGAGGCT	CAGTAAGGCA	GAATCTCTGC	540
	CCAGGAAGC	CCTTCTTGTA	TGTCAATGCC	ACAGAGCTGG	ATGATCCGGC	CACCTCCCAAT	600
	GCCGAGCTTT	ATTACAGAT	TGTATCCAG	CTTCCCATGA	TCAACAATGT	CATGTACTTT	660
	CAGATCAACA	ACAAAACGGG	AGCCATCTCT	CTTACCCGAG	AGGGATCTCA	GGAAATGAAT	720
65	CCTGCTAAGA	ATCCTTCCCTA	TAATCTGGTG	ATCTCAGTGA	AGGACATGGG	AGGCCAGAGT	780
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	CAGGTGCGGT	GGANTGATCC	CGGTGCACAA	TATTCCTTAG	TTGACAAGGA	GAAGCTGCCA	960
	AGATTCCCAT	TTTCAATTGA	CCAGGAAGGA	GATATTTAAG	TGACTCAGCC	CTTGGACCCA	1020
70	GAGAAAAGG	ATGCATATGT	TTTTTATGCA	GTGCAAAAGG	ATGAGTACGG	AAAACCACTT	1080
	TCATATCCGC	TGGAATTTCA	TGTAAAGTT	AAAGATATTA	ATGATATCC	ACCTACATGT	1140
	CCGTACCCAG	TAACCGTATT	TGAGTCCAG	GAGAATGAAC	GACTGGGTAA	CAGTATCGGG	1200
	ACCTTATCTG	CACATGACAG	GGATGAAGAA	AATACTGCCA	ACAGTTTCTT	AAACTACAGG	1260
	ATTGTGAGC	AAACTCCCAA	ACTTCCCATG	GATGGACTCT	TCCTAATCCA	AACCTATGCT	1320
75	GGAATGTTAC	AGTTAGCTTA	ACAGTCCCTG	AAGAAGCAAG	ATACTCTCA	GTACAACCTA	1380
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	GATATCAATG	ATCAGATCCC	CATCTTTGAA	AAATCGATT	ATGGAACCTT	GACTCTTGCT	1500
	GAAGACACAA	ACANTGGGTC	CACCATCTTA	ACCATCCAGG	CCACTGATGC	TGATGAGCCA	1560
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80	GGGGTTGACA	AGTACCTCCA	TACCAACACC	GGATATGTCA	TAAATAAAA	GOCTCTTGAT	1680
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	AATGAAGCAC	CTCAATTTTC	CCAACACGTA	TTCCAAGCGA	AAGTCAGTGA	GGATGTAGCT	1860
	ATAGGCACTA	AGTGGGCA	TGTGACTGCC	AAGGATCCAG	AAGGTCTGGA	CATAAGCTAT	1920
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5	AGTGTGGCTC	CATTGGACAG	AGAAGCCGGA	AGTCCATATC	GGGTACAAGT	GGTGGCCACA	2040
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	AATGACAACC	CTCCAGGCT	AGCCAAAGBAC	TACACGGGCT	TGTTCTCTCG	CCATCCCCTC	2160
	AGTGCACCTG	GAAGTCTCAT	TTTCAGGCT	ACTGATGATG	ATCAGCACTT	ATTTCGGGCT	2220
	CCCCATTTTA	CATTTTCCCT	CBGCACTGGA	AGCTTACAA	ACGACTGGGA	AGTTTCCAAA	2280
	ATCAATGGTA	CTCATGCCCG	ACTGCTTACC	AGGCACACAG	AGTTTGAGGA	GAGGGAGTAT	2340
	GTCTCTCTGA	TCGCGATCAA	TGATGGGGGT	CBGCCACCTT	TGGAAGGCAT	TGTTCTTTTA	2400
	CCAGTTACAT	TCCTGCACTG	TGTGGAAGGA	AGTTGTTTCC	GGCCAGCAGG	TCACCAGACT	2460
10	GGGATACCCA	CTGTGGGCAT	GGCAGTTGGT	ATACTGCTGA	CCACCTTCT	GGTGATTGGT	2520
	ATAATTTTAG	CAGTTGTGTT	TATCCGCATA	AAGAAGGATA	AAGGCAAAGA	TAATGTTGAA	2580
	AGTGCTCAAG	CACTGAAAT	CAAACTCTCG	AGAACTGAA	TTTGAAAAGG	AATGTTTGAA	2640
	TTTATATAGC	AAATGCTATT	TCAGCAACAA	CCATCTCATC	CTATTACTTT	TCATCTAAAG	2700
	TGCATTATAA	TTTITTAAC	AGATATTCCC	TCTGTCTCTT	TAATATTTCG	TAATATTTC	2760
15	TTTTTTGAGG	TGGAGTCTTG	CTCTGTGCCC	CAGGCTGGAG	TACAGTGGTG	TGATCCAGC	2820
	TCAGTCAAC	CTCCGCTCTC	TGGGTTTACA	TGATTCTCCT	GCCTCAGCTT	CCTAAGTAGC	2880
	TGGGTTTACA	GGCACCCACC	ACCAATGCCA	GCTAATTTTT	GTATTTTTAA	TAGAGACGGG	2940
	GTTCGCCCAT	TTGGCCAGGC	TGGTCTTGAA	CTCCTGACGT	CAAGTGATCT	GCCTGCCCTG	3000
	GTCTCCCAAT	ACAGGCATGA	ACCACTGCAC	CCACCTACIT	AGATATTTC	TGTCTATAG	3060
20	ACATTAGAGA	GATTTTTCAT	TTTTTCCATG	CATTTTTCTT	CTCTGCAAA	GGCTTAGCTA	3120
	CTTGTTGTTT	TCCTTTTGG	GGCAAGACAG	ACTCATTAAA	TATTTCTGTAC	ATTTTCTCTT	3180
	TATCAAGGAG	ATATATCAGT	GTGTCTCAT	AGAACTGCTT	GGATTTCATT	TATGTTTTTT	3240
	CTGATTTCCAT	CCTGTGTCCC	CTTCATCCTT	GACTCCTTTG	GTATTTTCACT	GAATTTCAA	3300
	CATTGTCTAG	AGAGAGAAAA	CGTAGGACT	CAGGAAAAAT	AAATAAATAA	AAGAACAGCC	3360
25	TTTTCCCTTA	GTATTAAACAG	AAATGTTTCT	GTGTCTTAA	CCATCTTTAA	TCATGTTGAC	3420
	ATGTGCTCT	TTGGCTGAAA	TTCTTCAACT	TGGAATGAC	ACAGACCCAC	AGAAGGTGTT	3480
	CAAAACACAC	CTACTCTGCA	AACTTGGSTA	AAGGAACAG	TCAGCTGGCC	AGATTTCTCT	3540
	ACTACCTGCC	ATGCATACAT	GCTGCGCATG	TTTTCTTCT	TGATATGTTA	GTAAAGTTT	3600
30	GGTTATTATA	TATTTAACAT	GTGGAAGAAA	ACAAGACATG	AAAAGAGTGG	TGACAAATCA	3660
	AGAATAAACA	CTGGTTGTAG	TCAGTTTGTG	TTGTTAA			3697

Seq ID NO: C20 DNA Sequence
Nucleic Acid Accession #: NM_004443
Coding sequence: 28..3024

35	1	11	21	31	41	51	
	GGCTGGCTC	CTAGAGCTGC	CACGGCCATG	GCCAGAGCCC	GCCGCGCGCC	GCCGCGCTCG	60
40	CCGCGCGCGG	GGCTTCTGCC	GCTGCTCCTT	CCGCTGCTGC	TGCTGCGCGT	GCTGCTGCTG	120
	CCCGCGGGCT	GCGGGGCGCT	GGAAGAGACC	CTCTGAGACA	CAAAATGGGT	AACATCTGAG	180
	TTGGCGTGGG	CATCTCATCC	AGAAAGTGGG	TGGGAAGAGG	TGAGTGGCTA	CGATGAGGCC	240
	ATGAATCCCA	TCGCGCATGA	CCAGGTGTGT	AATGTGCGCG	AGTCAAGCCA	GAACAACCTG	300
	CTTCGCACTG	GGTTTCTCTG	GCGGCGGGAT	GTGCAAGCGG	TCATCGTGGG	GCTCAAGTTC	360
45	ACTGTGCGTG	ACTGCAACAG	CATCCCAAC	ATCCCGGCT	CTTGCAGGGA	GACCTTCAAC	420
	CTCTTCTACT	ACGAGGCTGA	CAGCGATGTG	GOCTCAGCCT	CCTCCCTCTT	CTGGATGGAG	480
	AACCCCTACG	TGAAGTGGG	CACCATTTGA	CCGATGAGA	GCPTCTGCGG	GCTGGATGCC	540
	GGCCGTGTCA	ACACCAAGGT	GCGCAGCTTT	GGGCCACTTT	CCAAGGCTGG	CTTCTACCTG	600
	GCCTTCAGG	ACCAAGGCGC	CTGCATGTGG	CTCATCTCCG	TGCGCGCCTT	CTACAGAGAG	660
50	TGTGCACTCA	CCACGCGAGG	CTTCGACTC	TTCCCGAGGA	CCCTCAGTGG	GGCGAGAGCC	720
	ACCTCGCTGG	TCATTGCTCC	TGGCACCTGC	ATCCCTAACG	CCGTGGAGGT	GTGGGTGCCA	780
	CTCAAGCTCT	ACTGCAACGG	CGATGGGGAG	TGGATGGTGC	CTGTGGGTGC	CTGCACCTGT	840
	GCCACCGGCC	ATGAGCCAGC	TGCCAAGGAG	TCOCAGTGCC	GCCCTCTGCC	CCCTGGGAGC	900
	TACAAGGGGA	AGCAGGGAGA	GGGGCCCTGC	CTCCCATGTC	CCCCCAACAG	CCGTACCAAC	960
55	TCGCCAGCGG	CACTGATCTG	CACTGCGCAC	AAATACTTCT	ACCGTGCAGA	CTGCGACTCT	1020
	GCGGACAGTG	CCGTATCCAC	CGTGCCATCT	CCACCCCGAG	GTGTGATCTC	CAATGTGAAT	1080
	GAACCTCTAC	TGATCTCGGA	GTGGAATGAG	CCCGGGGACC	TGGGTGGCGG	GGATGACCTC	1140
	CTGTACATAG	TCATCTGCAA	GAAGTGCCAT	GGGGCTGGAG	GGGCTCAGC	CTGCTCAGCC	1200
	TGTGATGACA	ACGTGGAGTT	TGTGCTCCGG	CAGCTGGGCC	TGACGGAGCG	CCGGGTCCAC	1260
60	ATCAGCATTC	TGCTGSCCCA	CACGCGCTAC	ACCTTTGAGG	TGCAGGCGGT	CAACGCTGTC	1320
	TCGGGCAAGA	GGCTCTTGCC	GGCTCTGTAT	GGGGCGGTGA	ATATCACCAC	AAACCAAGCT	1380
	GGCCGCTCTG	AAATGCCCCC	ACTACGCTTG	CACAGCAGCT	CAGGCAGCAG	CCTCACCTTA	1440
	TCCTGGGCAC	CCCCAGAGCG	GCCCAACGGA	GTATCCTTGG	ACTACGAGAT	GAAGTACTTT	1500
	GAGAAGAGCG	AGGGCATCGC	CTCCACAGTG	ACCAGCCAGA	TGAACCTCCG	GCAGCTGGAC	1560
65	GGGCTTCGGC	CTGACGCGCG	CTATGTGGTC	CAGGTCCGTG	CCCGCACAGT	AGCTGGCTAT	1620
	GGGCACTACA	GGCGCCCTGC	CGAGTTTGA	ACCACAAGTG	AGAGAGGCTC	TGGGGCCACG	1680
	CAGCTCCAGG	AGCAGCTTCC	CCTCATGCTG	GGCTCCGCTA	CAGCTGGGCT	TGCTTCTGTG	1740
	GTGGCTGTG	TGCTCATGCG	TATGCTCTGC	CTCAGGAAGC	AGCGACACGG	CTCTGATTGG	1800
	GAGTACACGG	AGAAGCTGCA	CGAGTACATT	GCTCTCTGAA	TGAAGGTTTA	TATTTGACCT	1860
70	TTTACCTACG	AGGACCTTAA	TGAGGCTGTT	CGGGAGTTTG	CCAAGGAGAT	CGACGTGTCC	1920
	TGCGTCAAGA	TCGAGGAGGT	GATCGGAGCT	GGGGAATTTG	GGGAAGTGTG	CCGTGCTCGA	1980
	CTGAACACAG	CTGGCCGCGG	AGAGGTGTTT	GTGGCCATCA	AGACGCTGAA	GGTGGGCTAC	2040
	ACCGAGAGGC	AGCGCGCGGA	CTTCCTAAGC	GAGGCCCTCA	TCATGGGTCA	GTTCATACAC	2100
	CCCAATATAA	TCGGGCTGGA	GGGCGTGGTC	ACCAAAAGTC	GGCCAGTTAT	GATCCTCATT	2160
75	GAGTTTATGG	AAACTGTGCG	CTGGGACTCC	TTCTCTCGGC	TCACGATGG	GCAGTTCAAG	2220
	GTCTATCCAG	TGGTGGGCAT	GTTCGGGGGC	ATTGCTGCGG	GCATGAAGTA	CCTGTCCGAG	2280
	ATGAACATAT	TGCACCGGGA	CCTGGCTGCT	CGCAACATCC	TTGTCAACAG	CAACCTGGTC	2340
	TGCAAAAGTCT	CAGACTTTGG	CCCTCTCCGC	TTCTTGGAGG	ATGACCTCTC	CGATCCTACC	2400
	TACACCAAGT	CCCTGGGGGG	GAAGATCCCC	ATCCGCTGGA	CTGCCCCAGA	GGCCATAGCC	2460
80	TATCGGAAGT	TCACCTTCTG	TAGTGATGTC	TGGAGCTACG	GAATGTGTCAT	GTGGGAGGTC	2520
	ATGAGCTATG	GAGAGCGAGC	CTACTGGGAC	ATGAGCAACC	AGGATGTGAT	CAATGCCGTG	2580
	GAGCAGGATT	ACCGGCTGCC	ACCAACCATG	GACTGTCCCA	CAGCACTGCA	CCAGCTCATG	2640
	CTGGACTGCT	GGGTGCGGGA	CCGGAACCTC	AGGCCCAAAAT	TCTCCAGAT	TGTCAATACC	2700
	CTGGACRAGC	TCATCCGCAA	TGCTGCCAGC	CTCAAGGTCA	TTGCCAGCGC	TCAGTCTGGC	2760
	ATGTCTACAG	CCCTCTGGA	CCGACAGGTC	CCAGATTACA	CAACCTTCAC	GACAGTTGGT	2820

5	GATTGGCTGG	ATGCCATCAA	GATGGGGGCG	TACAAGGAGA	GCTTCGTCAG	TGCGGGGTTT	2880
	GCATCTTTTG	ACCTGGTGGC	CCAGATGACG	GCAGAAGACC	TGCTCCGTAT	TGGGGTCACC	2940
	CTGGCCGBC	ACGAGAGAA	GATCCTGAGC	AGTATCCAGG	ACATGCGGCT	GCAGATGAAC	3000
	CAGACCGTGC	CTGTGCAGGT	CTGACACCGG	CTCCACCGGG	GACCTGAGG	ACCGTGACGG	3060
	GATGCCAAGC	AGCCGGCTGG	ACTTTCGGAC	TCTTGGACTT	TTGGATGCCT	GGCCTTAGGC	3120
	TGTGGCCGAG	AAGCTGGAAG	TTTGGGAAG	GCCCAAGCTG	GGACTTCTCC	AGGCCTGTGT	3180
	TCCCTCCCCA	GGAGTGGCGC	CCCAAACCTC	TTCATATTGA	AGATGGATTG	GGAGAGGGGG	3240
	TGATGACCCC	TCCCCAAGCC	CCTCAGGGCC	CAGACCTTCC	TGCTCTCCAG	CAGGGGATCC	3300
10	CCACAACCTC	ACACTTGTCT	GTCTTTCAGT	GCTGGAGGTC	CTGGCAGGGT	CAGGCTGGGG	3360
	TAAGCCGGGG	TTCCACAGGG	CCAGGCCCTG	GCAGGGGTCT	GGCCCCCAG	GTAGGCGGAG	3420
	AGCAGTCCCT	CCCTCAGGAA	CTGGAGGAGG	GGACTCCAGG	AATGGGGAAA	TGTGACACCA	3480
	CCATCTTGAA	GCCAGCTTGC	ACCTCCAGTT	TGCACAGGGA	TTTGTCTTGG	GGGCTGAGGG	3540
	CCCTGTCCCC	ACCCCCCCCC	TTGGTGTGTG	CATAAAGGGG	CAGGCAGGGG	CAGGCTGAGG	3600
15	AGTTGCCCTT	TGCCCCCAG	AGACTGACTC	TCAGAGCCAG	AGATGGGATG	TGTGAGTGTG	3660
	TGTGTGTGTG	TGTGCGCGCG	CGCGCGCGTG	TGTGTGTGCA	CGCACTGGCC	TGCACAGAGA	3720
	GCATGGGTGA	GCCTGTAAAA	GCTTGGCCCT	GTGCCCTACA	ATGGGGCCAG	CTGGGCGGAC	3780
	AGCAGAATAA	AGGCAATAAG	ATGAA				3805

20 Seq ID NO: C21 DNA Sequence
Nucleic Acid Accession #: NM_001804
Coding sequence: 82..879

25	1	11	21	31	41	51	
	AGGTGAGCGG	TGCTCTGTGG	TGCGGGCGGC	CGGCAGCGGC	GGCTCCAGGG	CCCAGCATGC	60
	CGCGGGGACC	CGCGGGCCAC	CATGTATGTG	GGCTATGTGC	TGGACAAGGA	TTGGCCCGTG	120
	TACCCCGGCC	CAGCCAGGCC	AGCCAGGCTC	GGCTCGGGCC	CGGCAAACTA	CGGCCCCCGG	180
30	GGCCCGCCCC	CGCGCGCCCC	GCAGTACCCC	GACTTCTCCA	GCTACTCTCA	CGTGGAGCGG	240
	GGCCCGCGCG	CCCGGACGGC	CTGGGGGGCG	CCCTTCCCTG	CGCCCAAGGA	CGACTGGGCC	300
	GGCGCCTACG	GGCCGGGCCC	CGCGGCCCTT	GGCCCGAGCC	CAGCTTCGCT	GGCATTGGGG	360
	CCCCCTCCAG	ACTTTAGCCC	GGTGGCGGCG	CCCCCTGGGC	CGCGCCCCGG	CCTCTGGCGG	420
	CAGCCCTCTG	GGGGCCCGGG	CACACCGTCC	TGCGCCGGAG	CGCAGAGGCC	GACGCCCTAC	480
35	GAGTGGATGC	GGCGCAGCGT	GGCGGCGGGA	GGCGGCGGTG	GCAGCGGTAA	GACTCGGACC	540
	AAGGACAAAT	ACCGGTGTGT	CTACACCGAC	CACCAACGCC	TGGAGCTGGA	GAAGGAGTTT	600
	CATTACAGCC	GTTACATCAC	AATCGGGGGG	AAATCAGAGC	TGGCTGCCAA	TCGTGGGCTC	660
	ACTGAACGGC	AGGTGAAGAT	CTGGTTCCAA	AAACGGCGGG	CAAGAGAGCG	CAAAAGTGAAC	720
	AAGAAAGAAC	AGCAGCAGCA	ACAGCCCCCA	CAGCGGCCGA	TGGCCACGGA	CATCACGGCC	780
40	AGCCACGCGG	GGCCATAGCT	GGGGGGGCTG	TGTCCGAGCA	ACACGAGCCT	CCTGGCCACC	840
	TCCTCTCCAA	TGCCGTGAA	AGAGGAGTTT	CTGCCATAGC	CCCATGCCCA	GCTTGTGCGC	900
	CGGGGGA.CCT	GGGACTCGG	GTCCTGGGAG	TGTGGCTCCT	GTGGGGCCAG	GAGGTCTGGT	960
	CCGAGTCTCA	GGCCTGACCT	TCTGGGCAT	GCTGGACAGT	CACCTATCCA	CCCTCTGCAT	1020
	CCCTTGGCCG	CATTGTGTGC	AGTAAGCCTG	TTGGATAAAG	ACCTTCCAGC	TCCTGTGTTC	1080
45	TAGACCTCTG	GGGACATAAG	GAGTCCAGGG	TGGATGATCT	CAATCTCCCG	TGGGCATCTC	1140
	AAGCCCCAAA	TGTTTGGGGG	AGGGGCTTAG	ACAAGGCTCC	AGGCCCCACC	TCCTCTCTCA	1200
	TACGTTTCAA	GTTGCAGCTG	GAGGCGCTTG	TGGGGACCAC	ACTGATCTCT	GAGAAAAGGG	1260
	ATGGAGCTGA	AAAAGATGGA	ATGCTTGCA	AGCATGA.CCT	GAGGAGGGAG	GAACGTGGTC	1320
	AACTCACACC	TGCCCTCTCT	GCAGCCTCAC	CTCTACCTGC	CCCCATCATA	AGGGCACTGA	1380
50	GGCCCTTCCA	CTCTGGATAC	TAAGCACAAA	GGCCATAGCA	CTGGGCTCTG	ATGGCTGCTC	1440
	CACCTGGGTA	CAGAAATACA	GGCCCTCATG	TCATTCTCAG	TGAGGGCTCT	GGATTGAGAG	1500
	GGAGGCCCTG	GGAGGAGAGA	AGGGGGCAGA	GTCTTCCCTA	CCAGGTTTCT	ACACCCCGGC	1560
	CAGGCTGCCC	ATCAGGGCCC	AGGGAGCCCC	CAGAGGACTT	TATTCGGACC	AAGCAGAGCT	1620
	CACAGCTGGA	CAGGTGTTCT	ATATAGAGTG	GAATCTCTTG	GATGCAGCTT	CAAGAAATAA	1680
55	TTTTCTCTCT	CTTTTCAAA					1699

Seq ID NO: C22 DNA Sequence
Nucleic Acid Accession #: NM_021978
Coding sequence: 36..2603

60	1	11	21	31	41	51	
	GACGCGCTGT	AGACCCGCGA	GGCGGCTCGG	GGACCATGGG	GAGCGATCGG	GCCCGCAAGG	60
	GCGGAGGGGG	CCCGAAGGAC	TTGGGCGCGG	GACTCAAGTA	CAACTCCCGG	CACGAGAAAG	120
65	TGAATGGCTT	GGAGGAAGGC	GTGGAGTTCC	TGCCAGTCAA	CAAGGTCAAG	AAGGTGGAAA	180
	AGCATGGCCC	GGGGCGCTGG	GTGGTGTCTG	CAGCGGTGCT	GATCGGCTTC	CTCTTGTGCT	240
	TGCTGGGGAT	CGGCTTCTTG	GTGTGGCATT	TGCAGTACCG	GGACGTGGGT	GTCCAGAAAG	300
	TCITCAATGG	CTACATGAGG	ATCACAAATG	AGAAATTTGT	GGATGCCCTAC	GAGAACTCCA	360
	ACTCCACTGA	GTTTGTAAAC	CTGGCCAGCA	AGGTGAAGGA	CGCGCTGAAG	CTGCTGTACA	420
70	GCGGAGTCCC	ATTCTTGGGC	CCCTACCCACA	AGGAGTCGGC	TGTGACGGCC	TTCAGCGAGG	480
	GCAGCGTCAT	CGCCTACTAC	TGGTCTGAGT	TCAGCATCCC	GCAGCACTTG	GTGGAGGAGG	540
	CCGAGCGCGT	CATGGCCGAG	GAGCGCGTAG	TCATGCTGCC	CCCGGGGGCG	CGCTCCCTGA	600
	AGTCTTTTGT	GGTCACTTCA	GTGGTGGGCT	TCGCCAGCGA	CTCCAAACCA	GTACAGAGGA	660
	CCAGGACAAA	CAGCTGCAGC	TTTGGCCCTG	ACGCCCGCGG	TGTGGAGCTG	ATGGGCTTTC	720
75	CCACGCCCCG	CTTCCCTGAC	AGCCCCCTAC	CGGCTCATGC	CCGCTGGCCG	TGGGCCCTGC	780
	GGGGGGACGC	CGACTCACTG	CTGAGCCTCA	CCCTTCCGAG	CTTTGA.CCTT	CGCTCCTGCG	840
	ACGAGCGCGG	CAGCGACCTG	GTGACGGTGT	ACAACACCTT	GAGCCCCATG	GAGCCCCACG	900
	CCCTGGTGCA	GTGTGTGGGC	ACCTACCCCT	CCTCCTACAA	CCTGACCTTC	CATCCTCCCT	960
	AGAAGCTGCT	GCTCATCACA	CTGATAACCA	ACACTGAGCG	GCGGCATPCC	GGCTTTGAGG	1020
80	CCACCTTCTT	CCAGCTGGCT	AGGATGAGCA	GCTGTGGAGG	CGGCTTAAGT	AAGGCCCAAG	1080
	GGACATTCAA	CAGCCCCCTAC	TACCCAGGCC	ACTACCCACC	CAACATTGAC	TGTCATCGGA	1140
	ACATTGAGGT	GCCCCAACAC	CAGCATGTGA	AGGTGCGCTT	CAAAATCTTC	TACCTGCTGG	1200
	AGCCCGCGGT	GGCTGCGGGC	ACCTGCCCCA	AGGACTACGT	GGAGATCAAT	GGGAGAGAAAT	1260
	ACTGCGGAGA	GAGGTCCGAG	TTCGTGTCGA	CCAGCAACAG	CAACAGATAC	ACAGTTGCTT	1320
	TCCACTCAGA	TCAGTCTTAC	ACCGACACCG	GCTTCTTAGC	TGAATACCTC	TCCTACGACT	1380

5	CCAGTGACCC	ATGCCCGGGG	CAGTTCACGT	GCCGCACGGG	GCGGTGTATC	CGGAAGGAGC	1440
	TGCGCTGTGA	TGGCTGGGAC	GACTGCACCG	ACCCACAGCGA	TGAGCTCAAC	TGCAGTTGCG	1500
	ACGCCGGCCA	CCAGTTTCAG	TGCAAGAACA	AGTTCTGCAG	GCCCTCTCTC	TGGGTCTGCG	1560
	ACAGTGTGAA	CGACTGCGGA	GACAACAGCG	ACGAGCAGGG	GTGCAGTGTG	CCGGCCOCAGA	1620
	CCTTCAGGTG	TTCCAAATGG	AAGTGCCTCT	CGAAAAGCCA	GCAGTGCAAT	GGGAAGGACG	1680
	ACTGTGGGGA	CGGCTCCGAC	GAGGCTCTCT	GCCCAAGGT	GAACTGTCTC	ACTTGTACCA	1740
	AACACACCTA	CCGCTGCCTC	AATGGGCTCT	GCTTGAGCAA	GGGCAACCTT	GAGTGTGACG	1800
	GGAAGGAGGA	CTGTAGCGAC	GGCTCAGATG	AGAAGGACTG	CGACTGTGGG	CTCGGGTCAT	1860
10	TCACGAGACA	GGCTCGTGT	GTGGGGGCA	CGGATGCGBA	TGAGGGCGAG	TGGCCCTGGC	1920
	AGGTAAAGCT	GCATGCTCTG	GGCCAGGGCC	ACATCTGCGG	TGCTTCCCTC	ATCTCTCCCA	1980
	ACTGTGCTGT	CTCTGCCGCA	CACCTGCTAC	TCGATGACAG	AGGATTCAGG	TACTCAGACC	2040
	CCACGCACTG	GACGGCCTTC	CTGGGCTTGC	ACGACCAGAG	CCAGCGCAGC	GCCCTGTGGG	2100
	TGCAAGAGCG	CAGGCTCAAG	CGCATCATCT	CCACCCCTTT	CTTCAATGAC	TTCACTTCG	2160
15	ACTATGACAT	CGCGCTGCTG	GAGCTGGAGA	AACGGGCAGA	GTACAGCTCC	ATGGTGTGGC	2220
	CCATCTGCTT	CCCATGCTCT	TCCCATGTCT	TCCCTGCCCG	CAAGGCCATC	TGGGTACCGG	2280
	CGTGGGGACA	CACCCAGTAT	GGAGGCACTG	GCGCGCTGAT	CCTGCAAAAG	GGTGAGATCC	2340
	GGGTATCAAA	CCAGACCAAC	TGCGAGAAC	TCTGCCCCCA	GCAGATCAGC	CCGCGCATGA	2400
	TGTGGGTGGG	CTTCTCTCAG	GGCGGCGTGG	ACTCTGTCCA	GGGTGATTCC	GGGGGACCCC	2460
20	TGTCAGGCTT	GGAGGCGGAT	GGGCGGATCT	TCCAGGCCCG	TGTGTGTAGC	TGGGGAGACG	2520
	GGTGCCTCTA	GAGGAACAGG	CCAGGCGTGT	ACACAGGCT	CCCTCTGTCT	CGGACTGGA	2580
	TCAAAGAGAA	CATGGGGTGA	TAGGGGCCGG	GGCCACCCAA	ATGTGTACAC	CTGCGGGGCC	2640
	ACCCATCGTC	CACCCCACTG	TGCACGCGCT	CAGGCTGGAG	ACTGGACGCG	TGACTGCACC	2700
	AGCGCCCCCA	GAACATACAC	TGTGAACCTA	ATCTCCAGGG	CTCCAAATCT	GCCTAGAAAA	2760
25	CGCTCTGCTT	CCTCAGCTTC	CAAAAGTGGG	CTGGGAGGTA	GAGGGGAGGG	ACACTGTGTG	2820
	TTCTACTGCT	CCACTGGGGG	GCAAAGGTTT	GAAGACACAG	CCTCCCCGCG	CAGCCCCAAG	2880
	CTGGGCGGAG	GCGCGTTTGT	GTATATCTGC	CTCCCTGTCT	TGTAGGAGGC	AGCGGGAAAG	2940
	GAGCTTGGGA	GCCTCTCTAG	TGAAGTGGT	GGGCGTGGCG	GATCTGGGCT	GTGGGGCCCT	3000
	TGGGCCACGC	TCTTGAGGAA	GCCGAGGCTC	GGAGGACCTT	GGAAAACAGA	CGGCTCTGAG	3060
30	ACTGAAATGT	GTTTACCAAG	TCCAGGTGTA	CTTCAGTGTG	TGTATTGTGT	AAATGAGTAA	3120
	AACATTTTAT	TTCTTTTATA	AAAAAATA				3180

Seq ID NO: C23 DNA Sequence

Nucleic Acid Accession #: Eos sequence

Coding sequence: 1..2268

35	1	11	21	31	41	51	
	ATGCCCCCTT	TCCTGTTGCT	GGAGGCCGTC	TGTGTTTTCC	TGTTTTCCAG	AGTGCCCCCA	60
40	TCTCTCCCTC	TCCAGGAAGT	CCATGTAAGC	AAAGAAACCA	TGCGGAAGAT	TTCACTGCGC	120
	AGCAAAATGA	TGTGTGCTCT	GCTGTCAGTG	GACATCATGT	TTCTGTTAGA	TGGGTCTAAC	180
	AGCGTCCGGA	AAGGGAGGTT	TGAAGGTGCC	AAGCACTTTG	CCATCAACGT	CTGTGACGGT	240
	CTGGACATCA	GCCCGCAGAG	GCTCAGAGTG	GGAGCATTC	AGTTCACTTC	CACCTCTCTT	300
	CTGGAATTCC	CCTTGGATTG	ATTTTCAACC	CAACAGGAAG	TGAAGGCAAG	AATCAAGAGG	360
45	ATGTTTTTCA	AAGGAGGGCG	CAOAGAGACG	GAACCTGCTC	TGAATAACCT	TCTGCACAGA	420
	GGGTGCTCTG	GAGGCAGAAA	TGCTTCTGTG	CCCCAGATCC	TCATCATCGT	CACCTGATGG	480
	AAATCCCAAG	GGGATGTGGC	ACTGCCATCC	AAGCAGCTGA	AGGAAAGGGG	TGTCACTGTG	540
	TTTGTCTGTG	GGGTGAGGTT	TCCAGGTGG	GAGGAGCTGC	ATGCACTGCG	CAGCGAGCCT	600
	AGAGGGCAGC	ACGTGCTGTT	GGCTGAGCAG	GTGGAGGATG	CCACCAACGG	CCTCTTCAGC	660
50	ACCCCTCAGC	GCTCGGCGAT	CTGCTCCAGC	GCCACGCCAG	ACTGCAAGGT	CGAGGCTCAC	720
	CCCTGTGAGC	ACAGCAAGCT	GGAGATGGTC	CGGGAGTTTG	CTGGCAATGC	CCCATGCTGG	780
	AGAGGATCGC	GGCGACCCCT	TGGGTGTGCT	GCTGCACACT	GTCCCTTCTA	CAGCTGGAAG	840
	AGAGTGTTC	TAAACCAACC	TGCCACCTGC	TACAGGACCA	CCTGCCCAGG	CCCTGTGTAC	900
	TGCGAGCCCT	GCCAGAATGG	AGGCACATGT	GTTCAGAGAG	GACTGGACGG	CTACCAATGC	960
55	CTCTGCCCCG	TGGCCCTTGG	AGGGGAGGCT	AACTGTGCCC	TGAAGCTGAG	CCTGGAATGC	1020
	AGGTTGAGCC	TCTCTTCTCT	GCTGGACAGC	TCTGCGGGCA	CCACTCTGGA	CGGCTTCTTG	1080
	CGGGCCAAAG	TCTTGTGTGA	GCGGTTTGTG	CGGGCGGTGC	TGAGCBAAGG	CTCTCGGGCC	1140
	CGAGTGGGTG	TGGCCACATA	CAGCAGGGAG	CTGCTGTGTG	CGGTGCCCTG	GGGGGAGTAC	1200
	CAGGATGTGC	CTGACCTGGT	CTGAGGCTTC	GATGGCAATC	CCTTCCGTGG	TGGCCCCACC	1260
60	CTGACGGGCA	GTGCGCTTGG	GCAAGGCGCA	GAGCGTGGCT	TGGGAGGCGC	CACAGGACAC	1320
	GGCCAGGACC	GGCCACGTAG	AGTGGTGGTT	TTGCTCACTG	AGTCACTACT	CGAGGATGAG	1380
	GTGTCGGGCG	CAGCGCGTCA	CGCAAGGCGG	CGAGAGCTGC	TCTGTCTGGG	TGTAGGCACT	1440
	GAGGCGGTGC	GGGCAGAGCT	GGAGGAGATC	ACAGGCAAGC	CAAGCATGTG	GATGCTCTAC	1500
	TGCGATCTCT	AGGATCTGTT	CAACCAAAATC	CCTGAGCTGC	AGGGGAAGCT	GTGAGGCGG	1560
65	CAGCGGCGAG	GGTCCGCGAC	ACAAGCCCTG	GACCTGTGCT	TCATGTTGGA	CACCTCTGCC	1620
	TCAGTAGGGC	CCGAGAATTT	TGCTCAGATG	CAGAGCTTTG	TGAGAAGCTG	TGCCCTCCAG	1680
	TTTGAAGTGA	ACCTTGACGT	GATCAGGCTC	GGCCTGTGTT	TGTATGGCAG	CCAGGTGCAG	1740
	ACTGCTCTCG	GCTTGGACAC	CAAAACCAAC	CGGGCTGCGA	TGCTGCGGGC	CATTAGCCAG	1800
	GCTCCCTACC	TAGGTGGGGT	GGGCTCAGCC	GGCACCGCCC	TGCTGCACAT	CTATGACAAA	1860
70	GTGATGACCG	TCCAGAGGGG	TGCCCGGCGT	GGTGTCCCTA	AAGCTGTGCT	GGTGTCTACA	1920
	GGCGGGAGAG	GCCGAGAGGA	TGCAGCGGTT	CCTGCCCGAG	AGCTGAGGAA	CAATGGCATC	1980
	TCGTCTCTGG	TGCTGGGCGT	GGGGCCTGTC	CTAAGTGAGG	GTCTGCGGAG	GCTTGCAGTG	2040
	CCCGGGGATT	CCCTGATCCA	CGTGGCAGCT	TACGCCGACC	TGCGGTACCA	CCAGGACGTC	2100
	CTCATTTAGT	GGCTGTGTGG	AGAAGCCAAAG	CGGCCAGTCA	ACCTCTGCAA	ACCCAGGCCG	2160
75	TGCATGAATG	AGGGCAGCTG	CGTCTGCGAG	AATGGGAGCT	ACCGCTGCAA	GTGTGCGGAT	2220
	GGCTGGGAGG	GCCCCACTGC	CGAGAACCGA	TTCTTGAGAC	GCCCCGTA		2268

Seq ID NO: C24 DNA Sequence

Nucleic Acid Accession #: Eos sequence

Coding sequence: 1..2424

80	1	11	21	31	41	51	
	ATGCCCCCTT	TCCTGTTGCT	GGAGGCCGTC	TGTGTTTTCC	TGTTTTCCAG	AGTGCCCCCA	60
	TCTCTCCCTC	TCCAGGAAGT	CCATGTAAGC	AAAGAAACCA	TGCGGAAGAT	TTCACTGCGC	120

5	AGCAAAATGA	TGTGGTGCCT	GGCTGCAGTG	GACATCATGT	TTCTGTTAGA	TGGGTCTAAC	180
	AGCGTCGGGA	AAGGAGGCTT	TGAAAGGTCC	AAGCACTTTG	CCATCACAGT	CTGTGACGGT	240
	CTGGACATCA	GCCCGAGAG	GGTCAGAGTG	GGAGCATTC	AGTTCAATTC	CACCTCTCAT	300
	CTGGAATTC	CTCTGGATTC	ATTTTCAACC	CAACAGGAAG	TGAAGGCAAG	AATCAAGAGG	360
	ATGGTTTTCA	AAGGAGGGCG	CACGGAGACG	GAACITGCTC	TGAATATCCT	TCTGCACAGA	420
	GGGTTGCCCTG	GAGGCAGAAA	TGCTTCTGTG	COCCAGATCC	TCATCATCGT	CACGTATGGG	480
	AAGTCCACAG	GGGATGTGGC	ACTGCCATCC	AAGCAGCTGA	AGGAAAGGGG	TGTCACTGTG	540
	TTTGCTGTGG	GGGTGAGGTT	TCCAGGTGG	GAGGAGCTGC	ATGCACTGGC	CAGCGAGCCT	600
	AGAGGGCAGC	ACGTGCTGTT	GGCTGAGCAG	GTGGAGGATG	CCACCAACGG	CCTCTTCAGC	660
10	ACCTCTCAGCA	GCTCGGCCAT	CTGCTCCAGC	GCCACGCCAG	ACTGCAGGGT	CGAGGCTCAC	720
	CCCTGTGAGC	ACAGGACGCT	GGAGATGGTC	CGGGAGTTCC	CTGGCAATGC	CCCATGCTGG	780
	AGAGGATCGC	GCGCGACCC	TGCGGTGCTG	GCTGCACACT	GTCCCTTCTA	CAGCTGGGAG	840
	AGAGTGTTC	TAAACCCACC	TGCCACCTGC	TACAGGACCA	CCTGCCACGG	CCCCTGTGAC	900
	TGCGAGCCCT	GCCAGAAATG	AGGCACATGT	GTTCAGGAAG	GACTGGACGG	CTACCAAGTG	960
15	CTCTGCCCCG	TGGGCTTTGG	AGGGGAGGCT	AACITGCCCC	TGAAGCTGAG	CCTGGAATGC	1020
	AGGTTGAGCC	TGCTCTTCT	GCTGGACAGC	TCTGCCGGCA	CCACTCTGGA	CGGCTTCTTG	1080
	CGGGCCAAAG	TCTTGTGAA	GCGGTTTGTG	CGGGCGGTGC	TGAGCGAGGA	CTCTCGGGCC	1140
	CGAGTGGGTG	TGGCCACATA	CAGCAGGGAG	CTGCTGGTGG	CGGTGCTGT	GGGGGASTAC	1200
	CAGGATGTGC	CTGACCTGGT	CTGGAGCCTC	GATGGCATTG	CCTTCCGTGG	TGGCCCCACC	1260
20	CTGACGGGCA	GTGCGTTGCG	GCAGGCGGCA	GAGCGTGGCT	TGGGAGGCGC	CACAGGACCA	1320
	GGCCAGGAGC	GGCCACGTAG	AGTGGTGGTT	TTGCTCACTG	AGTCAACATC	CGAGGATGAG	1380
	GTTCGGGGCC	CACGCGGTCA	CGCAAGGGCG	CGAGAGCTGC	TCTCTGTGGG	TGTAGGCAAT	1440
	GAGGCCGTGC	GGCGAGAGCT	GGAGGAGATC	ACAGGCGGCC	CAAGCATGT	GATGGTCTAC	1500
25	TCCGATCCTC	AGGATCTGTT	CAACCAATC	CCTGAGCTGC	AGGGGAAGCT	GTGCAGCCGG	1560
	CAGCGGCCAG	GGTGCCTGAG	ACAAGCCCTG	GAACCTGTCT	TCATGTTGGA	CACCTCTGCC	1620
	TCAGTAGGGC	CCGAGAAATT	TGCTCAGATG	CAGAGCTTTG	TGAGGAAGCTG	TGCCCTCCAG	1680
	TTTGAGGTGA	ACCTGTGAGT	GACACAGTTC	GGCTTGGTGG	TGTATGGCAG	CCAGGTGCAG	1740
	ACTGCCCTTG	GGCTGAGCAC	CAAAACCCAC	CGGGCTGGGA	TGCTGGGGGC	CATTAGCCAG	1800
30	CGCCCCCTACC	TAGGTGGGCT	GGGCTCAGCC	GGCACCGCCC	TGCTGCACAT	CTATGACAAA	1860
	GTGATGACCG	TGCAGAGGGG	TGCCCGGCTT	GGTGTCCCGA	AAGCTGTGGT	GGTCTCACA	1920
	GGCGGAGAGG	GGCGAGAGGA	TGCAGCCGTT	CCTGCCAGGA	AGCTGAGGAA	CAATGGCATT	1980
	TCTGTCTTGG	TGCTGGGGCT	GGGGCTGTGC	CTAAGTGAGG	GTCTGGGGAG	GCTTCCAGGT	2040
	CCCGGGGATT	CCCTGATCCA	CGTGGCAGCT	TACGCCGACC	TGCGGTACCA	CCAGGACGTG	2100
35	CTCATTGAGT	GGCTGTGTGG	AGAGGCCAAG	CAGCCAGTCA	ACCTCTGCAA	ACCCAGCCCG	2160
	TGCATGAATG	AGGGCAGCTG	CGTCTGTGAG	AATGGGAGCT	ACCGCTGCAA	GTGTGGGAT	2220
	GGCTGGGAGG	GGCCCCACTG	CGAGAACCTT	GATGGAGGCT	CTTGTCTGTG	ATGTGTGAGC	2280
	CAGGGATGGA	TCTTGTGAGC	GCCCCGTAGG	CACATGGCTC	CGGTGCAGGA	GGGCAGCAGC	2340
	CGTACCCCTC	CCAGCAACTA	CAGAGAAGGC	CTGGGCACTG	AAATGGTGCC	TACCTTCTGG	2400
40	AATGTCTGTG	CCCCAGGCTC	TTAG				2424

Seq ID NO: C25 DNA Sequence

Nucleic Acid Accession #: XM_097386.3

Coding sequence: 142..795

45	1	11	21	31	41	51	
	CTGCAGAAC	CACCTGGACT	CTGTCCGCTG	CTGTCCCGCG	GCCTCCAGGG	CTCCTCTCCC	60
	GGGACCCCGG	TCCACGCGCT	GGGCCCCGCG	CGGGGGGAAG	CGCTGCTGCT	CTATCTCTGT	120
50	CTACCTCAGG	CTGACTTTT	GATGCCAAAA	TCTGAGCCCC	TGGGTGCGCT	CTCCCCCGCC	180
	TCCCGTGAC	CAGGCTCTGC	AGCAGCCACT	GGGGCTTGCG	TGCTGCTGCT	ATCTGGCGCC	240
	CCCTGGACCC	TGGGGCCCCC	GTGCACCTGC	CCACTCTGGA	GCCTGGGGAG	GGGCGGTGCA	300
	GGGTGAGGG	CTGGGTCTGC	TCCCTCGGCG	TGCGTGTGTG	TGTGGGGAAT	CCTGCGTGTG	360
	GTGTCTGTGG	GGATCCGCG	CTCCCGGCGG	TGGGTGGACC	TGGATTTCTA	CTCAGAGGAC	420
55	TTGAGCCTGC	TGTTAACTCC	GATGATTGTA	GGGACAGGCG	GGGTGGGTGG	GGGGTGGGGG	480
	CGAGGCTGGG	TCCCGGCCCA	GGAGAGGAGAA	GTGCTGGAAG	GCACTGGCCA	TGCTGGCGGT	540
	GGAAATGGGA	GGCGGTGTGA	GAGGGTCTAT	GGGGCCCGGT	CCTGGATACT	CGGCAAGGAG	600
	CCGTGTCTGC	AGAGGCTCTC	CCCTGCCCTCA	GGTGGCCCCG	TTCAACCCCA	GGCGTGCCCA	660
	TCTCTGACCA	CGGCTGTGCG	GTGGGGGTTT	AAATCGGGTG	TGGCTTCTGT	GGGTGCAGCT	720
	CAGCACCCCC	CCCTATGCGG	ACTGGGAGGG	GGTGGGGCAG	TCCCTCAGC	CACGAGGACC	780
60	CTGGATGGGT	TCTAGTTTAC	TGGGACCGT	GGGGCTTGGC	TGGGTACTGA	GTCGGTGCCT	840
	CACAGTCAAG	GCCAAACGGG	GCTCCCCCTG	CTCTGAGATG	TTGGGAGAAA	GGCGGCTTCT	900
	GGAACTTTC	GTGGGACCCG	TAAGTGGCTG	TCCAGAAAGG	CGGGAGGGTG	GGCACGGGGC	960
	ACGGGGGGCA	GCTGGGGTGG	TGTGTAAGGG	TCAAGCATCT	GTACAGTTGA	ATTTCCTTTT	1020
65	TCTTATCATG	TTTAACTCCA	CTTGTCCCTT	TTTCCCCCAA	TTGTGCTTTT	GCATTTTCTT	1080
	CCITGGCAAA	TGTAAACTCA	GCCTTTCTAT	CATGACGTGT	GAAATTTCTG	TTTCTCTGGA	1140
	GTCTGTGAGA	CGGGGTGGGA	ACCAACCGCT	AAACTCAGGT	AATAGGAGGA	AAAAAATAAA	1200
	AACITAAAAA	AATTTTAAAA	AAACATAAAA	CTACTCTCTA	CCTCTGGCTG	GGCCAGCCTT	1260
	GTCTGCGCCT	GGCGCGGGCA	GGGTGGCCTG	TACAAATTTT	AGTTTTTCGA	GAACATTCAG	1320
70	GTATTAAG	AAAAAA					1337

Seq ID NO: C26 DNA Sequence

Nucleic Acid Accession #: Bos sequence

Coding sequence: 95..2128

75	1	11	21	31	41	51	
	GGGGTAGTTT	GTAGGGAAGC	AGCTCTCCAC	GTGGGCGACT	GCGAGGCTGG	ACGCTACGGG	60
	CTCTCTGAAA	GGAGAGACAC	CAGCATTTCG	CACAATGCTG	TCATCCACTG	ACTTTACATT	120
80	TGCTTCTTGG	GAGCTTGTGG	TCCGCTGGA	CCATCCCAAT	GAAGAGCAGC	AGAAAGACGT	180
	CACACTGAGA	GTAICTGGAG	ACCTTCATGT	TGGAGGAGTG	ATGCTCAAGT	TAGTAGAACA	240
	GATCAATATA	TCCCAAGACT	GGTCAGACTT	TGCTCTTTGG	TGGGAACAGA	AGCATTCGCT	300
	GCTTCTGAAA	ACCCACTGGA	CCCTGGACAA	ATATGGGGTC	CAGGCGAGATG	CAAGCTTCTT	360
	CTTCAACCTT	CAGCATAAAA	TGCTGCGCCT	TGCTGCGCG	AATTTGAAGA	TGGTGGGTTT	420
	GCGAGTCAGC	TTCTCAGCTG	TGGTTTTTAA	AGCTGTCTGT	GATATCTGCA	AAATCCTGAA	480

	TATTAGAAGA	TCAGAAGAGC	TTTCCTTGTT	AAAGCCGTCT	GGTGACTATT	TTAAGAAGAA	540
	GAAGAAAAAA	GACAAAAATA	ATAAGGAACC	CATAATTGAA	GATATTCTAA	ACCTGGAGAG	600
	TTCTCCAACA	GCTTCAGGTT	CATCAGTAAG	TCCTGGTTTA	TACAGTAAAA	CCATGACCCC	660
5	TAATATATGAC	CCCATCAATG	GAACACCAGC	ATCATCCACC	ATGACTTGGT	TCAGTGACAG	720
	CCCTTTGACG	GAACAAAAC	GCAGCATCCT	GCATTCAGC	CAACCCCCCC	AGTCCCCAGA	780
	AGCAGTTGCG	GATATGTACC	AGCCTCGGTC	TCTGGTTGAT	AAAGCCCAAG	TCAATGCAGG	840
	TTGGCTAGAC	TCCTCACGCT	CCCTTATGGA	ACAAGGCATC	CAAGAGGATG	AGCAGCTGCT	900
	CTTAAGATT	AAATATTAAT	CTTCTTCGA	CTTGAATCCT	AAATATGATG	CTGTCCGAAT	960
	AAACCAACTC	TATGAGCAAG	CCAGGTGGGC	CATTCTCTTA	GAAGAAATG	ATTGCACAGA	1020
10	GGAAGAAATG	TGTATCTTTG	CAGCTCTACA	GTACCACATT	AGCAAACTGT	CGTTGTCTGC	1080
	TGAACACAG	GATTTTGACG	GCGAGTCCGA	GGTTGATGAA	ATAGAAGCGG	CGCTTTCTAA	1140
	TTTGAAGTA	ACCTTAGAAG	GTGGAAGAGC	GGACAGCCTT	TTGGAGGACA	TTACTGATAT	1200
	CCCTAAACTT	GCAGATAATC	TCAAAATTAT	TAGGCCCAAG	AGTTACTTAC	CAAAAGCTTT	1260
	CAACCAATAT	TGGTTTATCT	TTAAAGACAC	ATCCATAGCA	TACTTTAAAA	ATAAGGAATC	1320
15	TGAACAGGA	GAACCACTAG	AAAAACTAAA	TCTTAGAGGC	TGCGAAGTTG	TGCCCGATGT	1380
	AAATGTAGCA	GGAGAGAAAT	TTGGAATCAA	GTACTTAATC	CCTTTTCCCG	ATGGTATGAA	1440
	TGAAGTGTAT	TTGAGATGCT	ACCATGAGAA	TCAATACGCC	CAATGGATGG	CTGCTGCAT	1500
	GTGGCATCG	AAGGCAAAA	CCATGGCAGA	CAGCTCCTAC	CAGCCAGAGG	TCCTCAACAT	1560
	CCITTCATTT	CTGAGGATGA	AAAAACAGGA	CTCTGCATCT	CAGGTGGCTT	CCAGTCTCGA	1620
20	AAACATGGAT	ATGAACCCAG	AATGTTTGT	GTACACACGG	TGTGCAAAA	GACACAAATC	1680
	CAACAGCTG	CGCCGCCGGA	TCTTGGAGGC	GCACAGAAAC	GTGGCCCAAG	TGCCCTCGGT	1740
	CGAAGCCAG	CTCGGTTTCA	TCCAGGCGTG	GCAGTCACGT	CCTBAGTTG	GCCTCACCTA	1800
	CTACCTTGT	AGATTTAAG	GAAGCAAAA	AGATGACATT	CTGGGAGTTT	CATATAACAG	1860
	GTGATTAAA	ATTGATGCAG	CCACCGGAT	TCCAGTGACA	ACATGGAGAT	TCAAAATAT	1920
25	CAACAGTGG	AATGTAACT	GGGAAACCCG	GCAGGTGGTC	ATCGAGTTTG	ACCAAAACGT	1980
	CTTTACTGCT	TTACCTTCC	TGAGTGCAGA	TTGCAAGATT	GTGCAAGAGT	ACATTGGCGG	2040
	CTACATTTT	TGTCCACCC	GCTCCAGGA	CCAGAAATGA	ACACTCGATG	AGGACTTGT	2100
	CCACAAATG	ACCGGCGGTC	AGGATTGAAA	CAAGCAAGCG	TGCTCGGCTC	ACACCAACAA	2160
	GGCAAGCCAA	AGGCGCCCT	CCCCAGAGGG	ATCCCTAAGC	TGCCCCAGCAT	GTAGATTCTG	2220
30	GACTAACAGA	CAACATACAT	TCACCGCTGG	TCACCCAGAT	CCTCATTCAA	ACCCACTGCT	2280
	GGCAGATCCC	TTTCTTACT	TTGCCCTGTG	CTACCCAGCA	CGAAGAGAGC	CTCTCTTGT	2340
	TTTTCTATA	AATGGGTAGG	CAGGAGAAAA	GCAGGTGCC	TAAGATTGCT	CTAGGCCCA	2400
	GCATGGGTT	ACAGTTCTCT	GACTTGCAGA	ACCTGCCAGG	TGTATGGCTA	CAAGTTATCC	2460
	TCGTGCTGAT	CTGTCTCAT	ACTAAGTCAA	TGGAGAAGAC	AGAAAGGTAA	AAATCAGCTG	2520
35	TAGCAAGAAC	AATCTTTATT	TCACAACTC	AGGTATGAAA	CGAAACGCC	GTCTTCATG	2580
	GAATGCTTT	TAGCTTCTGT	CTTTTCAAAA	TGGCAGAGGG	AGTTCCCTACA	CACACTTTT	2640
	CCCTGGAGGC	CAAGGTCTAG	GGGTAGAAAG	GGGAGGGGTG	GGGCTACCAG	GTAGCAGTTG	2700
	ACAACCCAAG	GTCCAGAGAG	TGGCCCTCAG	TGTCTCTGT	CCACAGTGAT	ACCTGCCAAG	2760
	ATGACCACTG	ACCCACATCT	GGTCTTAGTC	ATTGGTCTCC	TCAGATTCT	GGGGCCACT	2820
40	GCAAGCCCCA	TTCATTCCT	ACAGATCTCT	CAGCCACCTG	TAAGTCTCTT	GTGAAGATGT	2880
	GGGTGACACA	GGGGACAGG	AAAAACCAAT	TCTCAACCCA	GATCCATGTC	TCCACGCTG	2940
	CTACTCTGGG	TTGGGATFCA	GGAGACAGG	CACAGTCTTC	TCTGTTTATA	GAACACCTG	3000
	CCAGTGTCAA	GGATTCCAGT	CAGGTGTCTA	TCCCAACTGG	TCAGGGAGAG	AAGGGCAGAC	3060
	CCATTCTCAA	AGACCAACAT	GTCCAGGTC	TGACAGCTCC	CCACTGGCTG	CCCCCAGAG	3120
45	GGCTTTAGGC	TGGTCTGGGT	CATGGGGAAG	CGTCCCTCTT	ATCGCTGCTC	TGTGTTCTCC	3180
	TGGATTGGGT	ATCTATGTTG	GTACAGCTCC	TGGCCCTTTA	TCTAAAGGAC	TTTGGCTTTT	3240
	GTAATACACA	AGCCAAATA	AGACTTTT	CTCCCTCTCT	GTTTTGTGCT	GTGTCTCTC	3300
	TGCTTGTAGA	CTGCCCTGAG	ACAGTGTCTG	CCTTGAGAGA	GTGAGCCAAT	TAACAGCTGC	3360
	CTGAATTGTC	ATTTTCCATT	TTGGTTTGT	AGAGGTGGGA	GGGGTGGGTT	TTGAGAGGTT	3420
50	CAAAAGCAAT	ACCAGAGATA	AAGGGAATA	TCAGRCATA	TTTTATTATT	TTTTCTATGA	3480
	TGTTCTGCCA	CACAAGAAC	TTGGGGTGT	AGGATAAGGC	AAAAGCTCCA	ATCCCATTTT	3540
	TCAGTTCTCC	TAGGATGCAC	CCCTCAGGGA	GCCTGCGCAG	AGTTCCGAGG	CCCGTGAGCG	3600
	TCAGCTGTG	CITTTATTTT	CATCAAGGCC	CTCTGAGAG	TGAGACCTCA	GCAATTCGCG	3660
	GAGCCACATA	GAGACAGACT	TGGCAAGGGA	CCCCCTGGTT	CTGAGCCAGT	AGCTGCCATC	3720
55	TGGAATTTCC	TCTTTTAGCC	TCTCCTTAGA	GGTGAATGTG	AATGAAGCCT	CCGAGGCACC	3780
	CGCTGAATTT	CTAGGGCCTT	GCTTAAAGCT	CAGAAGTGGT	TTAGGCATTT	GGAAAATCTG	3840
	GTTTCACATCA	TAAAGAACTT	GATTTGAAT	GTTTTCTATA	GAACCAAGTG	CTAAGGTGAC	3900
	CGTATTATAC	TGATGTTGG	TCATTTCTCA	GTCTATTTC	TCAGTTCTAT	TATTTTAGAA	3960
	CCTAGTCAGT	TCITTAAGAT	TATAACGGST	CCTACATTAA	AATAATGCTT	CTGATGTGCA	4020
60	GATTTTACCT	GTGCTGCT	GAGAACATCT	CTGCCATATT	TACCAAGGCC	AGACCTTCAG	4080
	TTCAACATGC	TTCTTAGCT	TTTCATAGTT	GTCTGACATT	TCCATGAAAA	CAAAGGAACC	4140
	AACCTTTGTT	TAAACAAACT	TTGTTTGGTT	ACAGTTTTC	GGGGAGCGTT	TCTTCCATGA	4200
	CACACAGCAA	CATCCCAAG	AAATAACAA	GTGTGACAAA	AAAAAANA	AACAAACCTA	4260
	AATGCTACTG	TTCCAAAGAG	CAACTTGATG	GTTTTTTTTA	ATACTGAGTG	CAAAGGTGCA	4320
65	CCCAATTTCC	TATGATGAAA	TTTTAAATTA	ATGGGCACCT	TTCAACATCA	TTTGCTTCCT	4380
	TATCTACAGT	TGATTCAGAA	ATCTGCATTT	TTTATTCTTT	TATATGACTT	TTAAGTAANA	4440
	GATTTATATG	GATTTGAAAA	AAAAAANA	A			4471

Seq ID NO: C27 Protein Sequence
Protein Accession #: NP_005162.1

	1	11	21	31	41	51	
75	MDGGTLPSRA	PPAPPVPVGC	AARRRPASPE	LLRCSRREBP	ATAETGGGAA	AVARRNERER	60
	NRVKLVNLFQ	QALRQHVPHG	GASKLSKVE	TLRSAYEYIR	ALQRLLAEDD	AVRNATAGGL	120
	RFQAVRPSAF	RPPGTTTPVA	ASPSRASSP	GRGGGSEPGS	PRSAYSDDSD	GCEGALSPAE	180
	RELLDFSSWL	GGY					193

Seq ID NO: C28 DNA Sequence
Nucleic Acid Accession #: NM_017763
Coding sequence: 169..2520

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 55
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CACCAGCTGC AGCTGGCTGC CCTCTGGCCC TGGCTGCTGA TGGCTACCTT GCAGGCAGGC 240
TTTGGACGCA CAGGACTGGT ACTGGCAGCA GCGGTGGAGT CTGAAAGATC AGCAGAACAG 300
AAAGCTGTTA TCAGAGTGAT CCCCTTGAAA ATGGACCCCA CAGGAAAACT GAATCTCACT 360
TTGGAAGGTG TGTITGCTGG TGTGCTGAA ATAACCTCAG CAGAAAGAAA ATTAATGCAG 420
TCCCAACCCAC TGACCTGTG CAATGCCAGT GATGACGACA ATCTGGAGCC TGGATTCTATC 480
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ACACAGCCCC AGCCAGAGCC ACCTTCTCTT GATCAGCAG TCACCGGATC CAACCTAGCA 1980
GCCCTTGGG GCGGCTCTCT TAACCCACAG TGGCCAGGGG CCTCCCTGA GCCAGCCCC 2040
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Seq ID NO: C29 Protein Sequence
Protein Accession #: NP_004280.2

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1 11 21 31 41 51
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MNSSAHYHVN FSQAISQDVN LHEAILLCPN NTFERDPTAR TSQSQSEFLQ LNSHTTNFSQ 60
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LCHLDQSDSD FHNHTYHLQP TAPESTSEPF PNPQKSQKTR SRYLEDYDRN 240
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Seq ID NO: C30 DNA Sequence
Nucleic Acid Accession #: NM_004442
Coding sequence: 19..2982

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	ACGATCCGCA	CGTACCAGGT	GTGCAACGTG	TTTGAGTCAA	GCCAGAACAA	CTGGCTACGG	240
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	GACCCCTCGG	ACATGCCCTG	CACAACCATC	CCCTCCGCGC	CCCAGGCTGT	GATTTCAGT	1020
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	TGGCGGGACA	ATGTACAGTA	CGCACCCACG	CAGCTAGGCC	TGACCGAGCC	ACGCAATTAC	1200
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	AAGATCTACA	TCATCTCTTT	CACCTACGAG	GACCCCAAGC	AGGCAAGTGC	GGAGTTTGCC	1860
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20 Seq ID NO: C31 DNA Sequence
 Nucleic Acid Accession #: NM_031942.1
 Coding sequence: 145..1260

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70 Seq ID NO: C32 DNA Sequence
 Nucleic Acid Accession #: NM_012445.1
 Coding sequence: 276..1271

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Seq ID NO: C33 DNA Sequence
Nucleic Acid Accession #: Eos sequence
Coding sequence: 1..1314

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Seq ID NO: C34 DNA Sequence
Nucleic Acid Accession #: NM_003045.1
Coding sequence: 148..2037

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Seq ID NO: C35 DNA Sequence
 Nucleic Acid Accession #: NM_002776.1
 Coding sequence: 82..912

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Seq ID NO: C36 DNA Sequence
 Nucleic Acid Accession #: XM_095088
 Coding sequence: 1..4074

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Seq ID NO: C37 DNA Sequence
Nucleic Acid Accession #: NM_032044
Coding sequence: 182..658

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Seq ID NO: C38 DNA Sequence
Nucleic Acid Accession #: Eos sequence
Coding sequence: 52..3042

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	GTAGATGTTT	GTAGTGTAT	GTATGTAAAC	ATTTCTTGTA	GGCATCACA	TGAACAAAGA	5700
	TATATTTTCT	ATTATTTTAT	TATATGTGCA	CTTCAAGAG	TCACTGTCTG	AGAAATAAAG	5760
80	AATTTGCTTA	AATGTCAAAA	AAAAAAGAAA	AAAAAAGAAA	AAAAAAGAAA	AAAAAAGAAA	5808

Seq ID NO: C39 DNA Sequence
Nucleic Acid Accession #: NM_014373
Coding sequence: 322.1338

	1	11	21	31	41	51	
	GTGGCCTCGA	GGTGGTGGCA	GGGCCGCCCC	CTGCAGTCCG	GAGACGAACG	CACGGACCGG	60
5	GCCTCCGGAG	GCAGGTTCGG	CTGGAAGGAA	CCGCTCTCGC	TTCTCTCTAC	ACTTGGCGCA	120
	ATGTCTCCGA	GCTTACTCAC	ATAGCATATT	GGTATATCAA	AATGAAATGC	AAGGAACCAA	180
	AAATAACATA	ATTGAAGGCA	GTAAAGTGA	AATTAAATAG	GAAGATCATC	AGTCAGGAA	240
	GACCCACTGG	AGAGGACAGA	AAATGAAGCA	GTGTTTATC	ATGTGTATT	CAGCAGGTCT	300
	TCCTGAAATT	TAACTAAAAA	TATGACTGCT	CTCTCTTCAG	AGAACTGCTC	TTTTCAGTAC	360
10	CAGTTACGTC	AAACAAACCA	GCCCTAGAC	GTAACTATC	TGCTATTCTT	GATCATACTT	420
	GGGAAATAT	TATTAATAT	CCTTACACTA	GGAATGAGAA	GMAAAACAC	CCTGCAAAAT	480
	TTTATGGAAAT	ATTTTTCAT	TTCACTAGCA	TTGTTGATC	TTTACTTTT	GGTAAACATT	540
	TCCATTATAT	TGTATTTCAG	GGATTITGTA	CTTTTAAACA	TTAGGTTTAC	TAAATACCA	600
	ATCTGCCTAT	TTACTCAAAAT	TATTTCTCTT	ACTTATGGCT	TTTTCGATTA	TCCAGTTTTC	660
	CTGACAGCTT	GTATAGATTA	TTGCCGAAAT	TTCTCTAAAA	CAACCAAGCT	TTCAATTAAAG	720
15	TGTCAAAAT	TATTTTATTT	CTTTACAGTA	ATTTTAAATT	GGATTTTCAGT	CCTTGCTTAT	780
	GTTTTGGGAG	ACCCAGCCAT	CTACCAAAAGC	CTGAAGGCAC	AGAATGCTTA	TTCTCGTCAC	840
	TGTCTCTTCT	ATGTACAGAT	TCAGAGTTAC	TGGCTGTCT	TTTTTCAATG	GATGATTTTA	900
	TTTGTAGCTT	TCATAACCTG	TTGGGAAGAA	GTTACTACTT	TGGTACAGGC	TATCAGGATA	960
20	ACTTCTCTATA	TGAATGAAC	TATCTTATAT	TTTCTTTT	CATCCCACTC	CAGTTATACT	1020
	GTGAGATCTA	AAAAAATATT	CTTATCCAAAG	CTCATGTCT	GTTTTCTCAG	TACCTGGTTA	1080
	CCATTGTGAT	TACTTCAGGT	AATCATGTGT	TTACTTAAAG	TTCAAGATTCC	AGCATATATT	1140
	GAGATGAATA	TTCCCTGGTT	ATACTTTGTC	AATAGTTTTC	TCATTGTCTAC	AGTGTATTGG	1200
	TTTAATTGCT	ACAAGCTTAA	TTTAAAGAC	ATTGGATTAC	CTTTGGATCC	ATTGTCAAC	1260
25	TGGAAGTCTC	GCTTCATTCC	ACTTCAAAAT	CCTAATCTTG	AGCAAAATGA	AAAGCCCTATA	1320
	TCATAAATAT	TTTGTATTA	TTATTAATTA	AAAGTTACAG	CTGTCTAAG	ATCATAATT	1380
	TATGAACAGA	AAGAACTCAG	GACATATTA	AAAATAAAT	GAACTAAAC	AACCTTTGCC	1440
	CCCTGACTGA	TAGCATTTCA	GAAATGTCT	TTTGAAGGAC	TATACCAAT	ATTAAATAGT	1500
	GTTTTATTTT	AAAAACAAAA	TAATTTCAAG	AAGTTTATAT	AGTTATTACAG	GGACACTATA	1560
30	TTACAAATAT	TACTTTGTTA	TTAACACAA	AAGTGATAG	AGTTAACATT	TGGCTATACT	1620
	GTATGTTTGT	TACTCTAAAA	AACTACTGG	ATGCAAACTG	TTATGTAAAT	CTGAGATTTC	1680
	ACTGACAACT	TTAAGATATC	AACCTAAACA	TTTTTATTAA	ATGTTCAAAAT	GTAAGCAAGA	1740
	AAAAAAA						1749

Seq ID NO: C40 DNA Sequence
Nucleic Acid Accession #: BC012089
Coding sequence: 1..2571

	1	11	21	31	41	51	
40	ATGGCCCTCG	TACTCGGCTC	CTGTGTGCTG	CTGGGGCTGT	GCGGGAATCT	CTTTTCAGGA	60
	GGGCAGCCTT	CATCCACAGA	TGCTCTTAAG	GCTTGGAAAT	ATGAATTCGC	TGCAACAAAT	120
	TATGAGACCC	AAGACTCCCA	TAAAGCTGGA	CCCATTTGCA	TTCTCTTTGA	ACTAGTGCAT	180
	ATCTTTCTCT	ATGTGGTACA	GCCGCGTGAT	TTCCAGAGAG	ATACTTTGAG	AAAATCTTAA	240
45	CAGAAGGCAT	ATGAATCCAA	AAATGATTAT	GACAGAGATT	TCTACTATGA	AGCAGGGATT	300
	ATTCTATGCT	GTGTCTGGGG	GCCTGTGTTT	ATTATTTCTGA	TGCTCTGGGT	GGGGTATTTT	360
	TTTGTATGAT	GTCTGTGCTG	TAACAAAATG	GGTGGAGAAA	TGCACCAAGC	ACAGAAAGGA	420
	AATGGGCCCT	TCTTGAGGAA	ATGCTTTTGA	ATCTCCCTGT	TGGTGATTTG	TATAATAAT	480
	AGCATTTGCA	CTTCTATAGG	TTTGTGGCA	AATCACCAGG	TAGAAACCCG	GATCAAAAGG	540
50	AGTCGGAAAC	TGGCAGATAG	CAATTTCAAG	GACTTGGCAA	CTCTCTTGAA	TGAAACTCCA	600
	GAGCAAACTA	AAATATATAT	GGCCAGTAC	AACACTACCA	AGGACAAGGC	GTTCAAGAT	660
	CTGAACAGTA	TCAATTCAGT	GCTAGGAGGC	GGAAATCTTG	ACCGACTGAG	ACCCACATC	720
	ATCCCTGTTC	TTGATGAGAT	TAACTCCATG	GCAACAGCGA	TCAAGGAGAC	CAAGAGGCG	780
	TTGGAGAACA	TGAACAGCAC	CTTGAAGAGC	TTGCACCAAC	AAAGTACACA	GCTTAGCAGC	840
55	AGTCTGACCA	CGGTGAAAC	TAGCTTBCG	TGATCTCTCA	ATGACCCCTC	GTGCTTGGTG	900
	CATCCATCAA	GTGAACCTG	CAACAGCATC	AGATTGTCTC	TAGCCAGCT	GAATAGCAAC	960
	CCCTGAAGTA	GGCAGCTTCC	ACCCGTGGAT	GCAGAACTTG	ACAAGCTTAA	TAACTTCTT	1020
	AGGACAGATT	TGGATGGCCT	GGTCAACAG	GGCTATCAAT	CCCTTAATGA	TATACTGAC	1080
	AGAGTACAA	GCCAAACAC	GACTGTGCTA	GCAGGTATCA	AAAGGGTCTT	GAATTCCTAT	1140
60	GGTTCAGATA	TGCACATGAT	AACTCAGCT	CTTCCATATC	AGGATATACT	CTCAGCATTC	1200
	TCGTGTTATG	TTAATAACAC	TGAAGTTTAC	ATCCACAGAA	ATTTACCTAC	ATTGGAGAG	1260
	TATGATTAT	ACTGTGGGCT	GGTGGGCTG	GTCTCTGCT	CTCTGCTGAC	CCTCATCGTG	1320
	ATTTTITACT	ACCTGGGCTT	ACTGTGGGC	GTGTGCGCT	ATGACAGGCA	TGCCACCCCG	1380
	ACCACCCGAG	GCTGTGTCTC	CAACCCCGGA	GGGTCTTCC	TCATGGTTGG	AGTTGGATTA	1440
65	AGTTTCTCTG	TTGTCTGGAT	ATTGATGATC	ATGTGGTTC	TTACCTTTGT	CTTTGGTGCA	1500
	AATGTGGAAA	AACGTATCTG	TGAACCTTAC	ACGAGCAAGG	AATTATTCGG	GGTTTGGAT	1560
	ACACCCACT	TACTAAATGA	AGACTGGGAA	TACTATCTCT	CTGGGAAGCT	ATTAAATAAA	1620
	TCAAAAATGA	AGCTCACTTT	TGAACAAGTT	TACAGTGACT	GCAAAAAAAA	TAGAGGCATC	1680
	TACGGCACTC	TTCACTTGCA	GAACAGCTTC	AAATATCAGT	AACATCTCAA	CATTATGAG	1740
70	CACTACTGGA	GCATAAGCAG	TGAATTGGAA	AGTCTGAAGG	TAAATCTTAA	TATCTTTCTG	1800
	TTGGGTGCG	CAGGAAGAAA	AAACCTTCAG	GATTTTGGTG	CTTGTGGAAAT	AGACAGAAATG	1860
	AAATATGACA	GCTACTTGGC	TCAGACTGGT	AAATCCCCCG	CAGGAGTGAA	TCTTTTATCA	1920
	TTTGCATATG	ATCTGAAGGC	AAAAGCAAAC	AGTTTGCTCC	CAGGAAATTT	GAGGAATCTC	1980
	CTGAAAGAG	ATGCACAAAC	TATTAATAACA	ATTCAACAGC	AACGAGTCTT	TCTTATAGAA	2040
75	CAATCACTGA	GCATCTTATA	CCAAAGCGTC	AAAGATCTTC	AACGCACAGG	GAATGGATTG	2100
	TTGGAGAGAT	TCTAGATGAT	CTGAGTTTTC	CTCAGAACTT	CATCACAAC	2160	
	AAATCTTCCT	CTGTATTAT	TGAGGAAACT	AAGAAGTATG	GGAGAAACAT	AATAGGATAT	2220
	TTTGAACATT	ATCTGCAGTG	GATCGAGTTC	TCTATCAGTG	AGAAAGTGGC	ATCGTSCAAA	2280
	CCGTGGCCA	CGCTCTTAGA	TACTGCTGTT	GATGCTTTTC	TGTGTAGCTA	CATTATCGAC	2340
80	CCCTTGAATT	TGTTTGTGTT	TGGCATAGGA	AAAGCTACTG	TATTTTACT	TCCGGCTCTA	2400
	ATTTTGGCG	TAAACTGGC	TAACTACTAT	CGTCAAGTGG	ATTGAGAGGA	CGTGAAGAT	2460
	GATGTTGAAA	CTATACCCAT	GAAAATATG	GAAAATGGTA	ATAATGGTTA	TCATAAAGAT	2520
	CATGTATATG	GTATTCACAA	TCTGTATTATG	ACAAGGCCAT	CACAACATTG	A	2571

Seq ID NO: C41 DNA Sequence

Nucleic Acid Accession #: NM_033049
Coding sequence: 28..1566

5	1	11	21	31	41	51	
	CCACGCGTCC	GAGCAGAAAC	AGCTAAAATG	AAAGCCATCA	TTCATCTTAC	TCTTCTTGCT	60
	CTCCCTTCTG	TAAACACAGC	CACCAACCAA	GGCAACTCAG	CTGATGCTGT	AACAACCACA	120
	GAAACTGCGA	CTAGTGGTCC	TACAGTAGCT	GCAGCTGATA	CCACTGAAAC	TAATTTCCCT	180
10	GAAACTGCTA	GCACCAACAG	AAATACACCT	TCTTTCCCAA	CAGCTACTTC	ACCTGCTCCC	240
	CCCATAAATTA	GTACACATAG	TTCTCTCCAA	ATTCTACAC	CTGCTCCCCC	CATAATTAGT	300
	ACACATAGTT	CCTCCACAAAT	TCCATATACCT	ACTGCTGCAG	ACAGTGAATC	AACCACAAAT	360
	GTAAATTCAT	TAGCTACCTC	TGACATAATC	ACCGCTTCAT	CTCCAAATGA	TGGATTAAATC	420
	ACAAATGGTTC	CTTCTGAAAC	ACAAAGTAAC	AATGAAATGT	CCCCCACCAC	AGAAGACAAT	480
15	CAATCATCAG	GGCTCTCCAC	TGGCACCGCT	TTATTGGAGA	CCAGCACCCCT	AAACAGCACA	540
	GGTCCACGCA	ATCCTTGCCA	AGATGATCCC	TGTGCAGATA	ATTGCTTATG	TGTTAAGCTG	600
	CATAATACAA	GTTTTTGCCCT	GTGTTTAGAA	GGGTATTACT	ACAACCTCTC	TACATGTAAG	660
	AAAGGAAAGG	TATTCCTCTG	GAGATTTCAT	GTGACAGTAT	CAGAAACATT	TGACCCAGAA	720
	GAGAAACATT	CCATGGCCTA	TCAAGACTTG	CATAGTGAAA	TTACTAGCTT	GTTTAAAGAT	780
20	GTATTGGGCA	CATCTGTGTTA	TGGACAGACT	GTAAATCTTA	CTGTAAGCAC	ATCTCTGTCA	840
	CCAGATCTG	AAATGCGTGC	TGATGACAAG	TTTGTTAATG	TAACATAGT	AACAATTTTG	900
	GCAGAAACCA	CAGATGACAA	TGAGAAGACT	GTGACTGAGA	AAATTAATAA	AGCAATTAGA	960
	AGTAGCTCAA	GCACCTTTCT	AACTATATGT	TTGACCTTTC	GGTGTGATTA	TTATGGCTGT	1020
	AAACGACACT	CAGATGACTG	CCTCAATGGT	TTAGCATGCG	ATTGCAAAATC	TGACCTGCAA	1080
25	AGGCTTAACC	CACAGAGCCC	TTTCTGCGTT	GCTTCCAGTC	TCAAGTGTC	TGATGCTGTC	1140
	AACGACACGC	CAAGCAATG	CTTAATAAAG	AAGGTGGTGG	GGGCCCCGTA	GTGTGCTGTC	1200
	GTGCCCCGCT	ACCAGGAAGA	TGCTAATGGG	AACTGCCAAA	AGTGTGCATT	TGGCTACAGT	1260
	GGACTCGACT	GTAAAGGACAA	ATTTTCAGCTG	ATCCTCACTA	TTGTGGGCAC	CATCGCTGGC	1320
	ATTGTCAATTG	TCAGCATCAT	AATGTGATGT	ATTGTCAACG	CAAGATCAAA	TAACAAAACG	1380
30	AAGCATATTG	AAGAAGGAAA	CTTGATTGAC	GAAGACTTTC	AAAATCTAAA	ACTGCGGTCTG	1440
	ACAGGCTTCA	CCAATCTTGG	AGCAGAAGGG	AGCGTCTTTC	CTAAGGTCA	GATAACGGCC	1500
	TCCAGAGACA	GCCAGATGCA	AAATCCCTAT	TCAAGACACA	GCAGCATGCC	CCGCCCTGAC	1560
	TATTAGAAATC	ATAAGAAATGT	GGAAACCGCC	ATGGCCCCCA	ACCAATGTAC	AAGCTATTAT	1620
	TTAGAGTGT	TAGAAGAGCT	GATGGAGAGG	TGAGCACCCAG	TAAAGATCTG	GCCTCCGGGG	1680
35	TTTTTCTTCC	ATCTGACATC	TGCCAGCCTC	TCTGAATGGA	AGTGTGTAAT	GTTTGCAACG	1740
	AATCCAGCTC	ACTTGTCTAA	TAAGATCTTA	TGACATTAAA	TGTAGTAGAT	GCTATTAGCG	1800
	CTTGTCAAGG	AGGTGGTTTT	CTTCAATCAG	TACAAAGTAC	TGAGACATG	GTTAGGGTTG	1860
	TTTTCTTAAT	TCTTTTCCCTG	GTAGGGCAAC	AAGAACCATT	TCCATCTAG	AGGAAGGCTC	1920
	CCAGCATTC	CTTGCTCTCTG	GGCAAAACATT	GCTCTTGAGT	TAAGTGACCT	AATTCCTCTG	1980
40	GGAGACATAC	GCATCAACTG	TGGAGGTCCG	AGGGGATGAG	AAGGGATACC	CACCACTTTT	2040
	CAAGGCTCAG	AAGCTCACTC	TCTGACAGT	CAGAATAGGG	ACACTGCTTC	TATCCCTCCA	2100
	ATGAGAGAT	TCTGGCAACT	TTTGAACAGC	CCAGAGCTTG	CAACCTAGCC	TCACCCAGA	2160
	AGACTGGAAA	GAGACATATC	TCTCAGCTTT	TTGAGGAGGC	GTGCTTGGGA	ATCCAGGAAC	2220
	TTTTTGATGC	TAAATGAAAG	GCCTGGACTA	AAAATGTCCA	CTATGGGGTG	CACCTACAG	2280
45	TTTTTGAAT	GCTAGGAGGC	AGAGGGGCA	GAGAGTAAAA	AACATGACCT	GGTAGAAGGA	2340
	AGAGAGGCAA	AGAAACTGG	GTGGGGAGGA	TCAATTAGAG	AGGAGGCACC	TGGGATCCAC	2400
	CTTCTTCTTT	AGGTCCCTTC	CTCCATCAGC	AAAGGAGCAC	TTCTCTAATC	ATGCCCTCCC	2460
	GAAGACTGGC	TGGGAGAGGG	TTTAAATAAC	AAAAATCCAG	GAGTAAGAGC	CTTAGGCTAG	2520
	TTTGAAATG	GAGCAAAACT	GTCTGGCAAA	GGGTGCGAGA	GGGAGCTTGT	CTCAGGAGT	2580
50	CCAGCCGTCC	AGCCTCGGGG	TGTAGGTTC	TGAGGTGTGC	CATTGGGGCC	TCAGCCTTCT	2640
	CTGGTGACAG	AGGCTCAGCT	GTGGCCACCA	ACACACACAC	ACACACACAC	AACACACAC	2700
	ACAAATGGGG	GCAACACAT	CCAGTACAG	CTTTTACAAA	TGTTATTAGT	GTCTTTTCTT	2760
	ATTTCTAATG	CTTGTCTCTC	TAAAGGTA	TTTATTATT	TATTATTATT	TGTTCTTGAC	2820
	TGTTAATTGT	GAATGGTAAT	GCAATAAAGT	GCCTTTGTTA	GATGGTGAAA	AAAAAATAAA	2880
55	AAAAAAA						2887

Seq ID NO: C42 DNA Sequence
Nucleic Acid Accession #: NM_001432.1
Coding sequence: 167..676

60	1	11	21	31	41	51	
	TCACCTTGCT	GATATTTCCT	GTGTGAGAGG	GACACAGCCA	ACGTGGGGTC	CCTTCTAGGC	60
	TGACAGCCCG	TCTCCAGCCA	CTGCCGCGAG	CCCGTCTGCT	CCCGCCCTGC	CCGTGCACTC	120
65	TCCGAGCCG	CCCTCCGCCA	AGCCCCAGCG	CCCGCTCCCA	TGCGCGATGA	CCGCGGGGAG	180
	GAGGATGGAG	ATGCTCTGTG	CCGGCAGGGT	CCCTGCGCTG	CTGCTCTGCC	TGGGTTTCCA	240
	TCTCTACAG	GCAGTCTCTA	GTACAACTGT	GATTCCATCA	TGTATCCGAG	GAGAGTCCAG	300
	TGATAACTGC	ACAGCTTTAG	TTGACAGAGA	AGACATCTCA	CGTGTGGCTC	AAGTGTCAAT	360
	AACAAAGTGT	AGCTCTGACA	TGAATGGCTA	TTGTTTGCAT	GGACAGTGCA	TCTATCTGGT	420
70	GGACATGAGT	CAAACTACT	GCAGGTGTGA	AGTGGGTTAT	ACTGTGTGCC	GATGTGAACA	480
	CTTCTTTTGA	ACCGTCCACC	AACCTTTAAG	CAAGAGTAT	GTGGCTTTGA	CCGTGATTCT	540
	TATTATTTTG	TTTCTTATCA	CAGTCTGCGG	TTCCACATAT	TATTTCTGCA	GATGGTACAG	600
	AAATCGRAAA	AGTAAGAAGC	CAAGAAGGA	ATATGAGAGA	GTTACCTCAG	GGGATCCAGA	660
	GTGCCGCAA	GTCTGGAATAT	GAGAGATTA	CCTCAGGGGA	TCCAGAGTTG	CCGCAAGTCT	720
75	GAATGGGCCC	ATCAAACTTA	TGGCGCAGGA	TAAAGTGTG	CCTGGTTAAT	ATTAATATTC	780
	CATTATTATTA	TGTTGAGTCA	AGTGTAGGT	CAATAACACT	GTATTTTAAT		840
	GTACTTGAAA	ATGTTTFTTA	TTTTTGTITT	ATTTTGTACA	GACTATTTGC	TAATGTATAA	900
	TGTGCAGAAA	ATATTTAATA	TCAAAAGAAA	ATTGATATTT	TTATACAAGT	AATTTCTCTA	960
	GCTAAATGCT	TCATTGAAGA	CTTCAAAGTT	TATATGCCCTG	GTGCACAGTG	CTTAGAAGTA	1020
80	AGCAATTCOC	AGGTCTATGC	TCAAGAATTG	TTAGCAAATG	ACAGATTTCT	GTAAGCCCTAT	1080
	ATATATAGCT	AAATCGATTT	AGTAAGTATG	TTTTTTATGT	TCTCAAATC	AGTGATATTT	1140
	GGTTTGTACTG	TACCATGGTT	TGATATGTAG	TTGGCACCAT	GGTATCATAT	ATTAAACAA	1200
	TAATGCAATT	AGAATTTGGG	AGAAGCAAT	ATAGGTCTGT	TGTTAAACAC	TACACATTGT	1260
	AAACAAAGTA	ACCTTGGGGA	GTCTATGGTC	TCTTCACTCA	GGTCTCAGCT	ATAATCTGT	1320
	TATATGAGGG	GCAAGTGACA	GTTCCTATAG	CCAACFACAG	ACTCCTACAG	GTACTAGTCA	1380

5	CTCATCTACC	AGATTCTGCC	TATGTAAAT	GAATTGAAAA	ACAATTTCT	GTAATCTTTT	1440
	ATTTAAGTAG	TGGGCATTTC	ATAGCTTCAC	AATGTTCTCT	TTTGTATAT	TACAACATTT	1500
	ATGTGAGGTA	ATTATTGCTC	AACAGACAAT	TAGAAAAAAG	TCCACACTTG	AAGCCTAAAT	1560
	TTGTGCTTTT	TAAGAATATT	TTTAGACTAT	TTCTTTTAT	AGGGGCTTTG	CTGAATCTTA	1620
	ACATTAAATC	ACAGCCCAAA	ATTGTATGGA	CTAATTATTA	TTTTAAATA	TATGAAGACA	1680
	ATAATTCTAC	ATGTTGTCTT	AAGATGGAAA	TACAGTTATT	TCATCTTTTA	TTCAAGGAAG	1740
	TTTTAACTTT	AATACAGCTC	AGTAAATGGC	TTCTTCTAGA	ATGTAAAGTT	ATGTATTTAA	1800
	AGTTGTATCT	TGACACAGGA	AATGGGAAAA	AACITAAAAA	TTAATATGGT	GTATTTTCTC	1860
10	AAATGAAAA	TCTCAATTGA	AAGCTTTTAA	AATGTAGAAA	CTTAAACACA	CCTTCTCTTG	1920
	GAGGCTGAGA	TGAAACCTAG	GGCTCATTTT	CCTGACATTT	GTATTTTCTT	TGGAAGAGAC	1980
	AAAGATTTCI	TCTGCACTCT	GAGCCCATAG	GTCTCAGAGA	GTTAATAGGA	GTATTTTCTG	2040
	GCTATTGCAT	AAGGAGCCAC	TGCTGCCACC	ACTTTTGGAT	TTTATGGGAG	GCTCTTCAT	2100
	CGAATGCTAA	ACCTTTGAGT	AGAGTCTCCC	TGGATCAGAT	ACCAGGTCAG	GGAGGATCTG	2160
15	TTCTTCTCT	ACGTTTATCC	TGGCATGTGC	TAGGGTAAAC	GAAGGCATAA	TAAGCCATGS	2220
	CTGACCTCTG	GACCCCTAGT	TGCCAGGACT	TGCTCTCCATG	TGTATCCATG	CATTATATAC	2280
	CCTGGTGCAA	TCACACCACT	GTCTCTTAAA	GTCTCTGGCC	TGGCCCTTAC	TATTAGGAAA	2340
	ATAAACAGAC	AAACCAAGT	AAATATATAT	GGTCTTATAC	ATATGTGATA	TATATTCATA	2400
20	TACAAACATG	TATGTATACA	TGACCTTAAT	GGATCATAGA	ATTGCAGTCA	TTTGGTGCTC	2460
	TGCTAACCAT	TTATATAAAA	CTTAAAAACA	AGAGAAAAAG	AAAATCAATT	AGATCTAAAC	2520
	AGTTATTTCI	GTTTTCTTAT	TAATATAGCT	GAAGTCAAAA	TATGTAAAG	CACATTTTAA	2580
	ATACTCTACT	TACAGTTGGC	CCTCTGTGGT	TAGTTCCACA	TCTGTGGATT	CAACCAACCA	2640
	AGGACGGAAA	ATGCTTAAAA	AATAATACAA	CAACAAACAA	AAATCACTTA	TAACAACAT	2700
	TTACTTTTCT	TTTCTTCTTT	TTGAGATGGA	GTCTCTCTCT	GTTCGCCAGG	TTGAGGTGCA	2760
25	TGAGCACGAT	CTCGGCTCAC	TGCAACCTCA	CCTCCCGGGT	TCAAGAGATC	CTCCTGCCTC	2820
	AGCCTCTCTG	GACAGCTGGG	CTACAGGCGC	ATGCCACCAT	GCCAGCTTAA	TTTTTGTATT	2880
	TTTAGTAGAG	GCGGGGTTTC	ACCATGTTGG	CCAGGATGGT	CTCAATCTCC	TAACCTTGAG	2940
	ATCCACCTTC	CAAGCTCTCC	CAAACTGCTG	GGATTACAGG	CGTGAAGCC	CGCAGGTAGC	3000
	ATTTACATTA	GGTATTACAA	GTATGTAAA	GATGATTTAA	GTATACAGGA	GGATGTGAAT	3060
30	AGTTTATATG	CAAGCACTAT	GCCTTTTAT	ATAAGTGACT	TGAACATCTG	TGCCCGATTI	3120
	TAGTATGTGC	AGGGGGGCGA	TCGGGGAATC	AGTCCCTGT	GGTACCCAG	GTACAACTGT	3180
	ATTTATTAA	GCTTACTAGA	TGTGAGGAGA	GTCTGAATAT	TTTCAGTGAT	CTTGGCTGTI	3240
	TCAAAAAAT	CTATTGACTT	TTCAATAAAT	CAGCTGCAAT	OCATTTTAT	CATTTACAAA	3300
	AGATTATTGT	TAGCCCTCTC	AATCTTGGTT	TTTCAGTTGA	TCTTAAGCAT	GTCAATTCAT	3360
35	AAAAACAAGT	CATTTTGTGA	TTTTTCATCT	TTAAGAAATG	TTAAAAAGC	TATCCCTTAA	3420
	ATAGCTTAGA	TCCTTGTAAA	TGCATATTAA	ATAATAAAGT	ATGACCCACA	TTACTTTTAA	3480
	TGGGTGAAAA	TACACAGAAA	ATATAGTTT	TAGTGAGGAT	GGTGCTGAGT	AAACATAAAA	3540
	ACTGATTTTC	TCTCAGCTGA	TGTGCTCTGT	ACACAGTGGG	AAGATTTTAG	TTCACTCTTA	3600
	GTCTAATCTC	CCCATTTTAC	AGATTCTTCA	CTATATATAT	TTCTAGAAGG	GGCTATGCAT	3660
40	ATTCATATGA	TTGAGAACCA	AAGCAACCC	AAATGCATAA	ATGCATAATT	TATGGTCTTC	3720
	AACCAAGGCT	ACATAATAAC	CCAGTTAACT	TACTCTTTAA	CCAGGAATAT	TAGATTCTAT	3780
	AACTAGTACT	CAAGGTTTAA	CCCTAAAAT	AAGATTCTCT	TAACTTTAAC	CTTAAATTTG	3840
	ATATTATATT	AAACATACAT	AATCAATGT	AACTCCACTG	TTCTCTGAAA	TATTTTGTGC	3900
	TCTAATCTCT	CTGCCGAAAG	TCAAAGTGAT	GGGAGAAATG	GTATAGTGGT	ATGACTACGT	3960
45	CTTAAGTCAG	ATTTTATATT	ATGAGTCTTT	GAGACTAAAT	TCAATCACCA	CCAGGTATCA	4020
	AATCAACTTT	ATATATGATT	CTAGTGTCTG	ACTTTTGTTA	AATTCAGTAA	AACTTCTTAA	4080
	TGCAGTTTTT	AAAAACCTGT	ATCTGACCCA	CTTTGTAAAT	TTTGCTCCAA	TATCCATTCT	4140
	GTAGACTTTT	GAAAAAAGAA	TTTTTAAATT	GATGCCCAAT	ATATTCTGAC	CGTTAAAAAA	4200
	TTCTTGTTCA	TATGGGAGAA	GGGGAGATTA	TGACTTGATC	AAACAGTATT	TCTGGTGTAT	4260
50	ATTTTAATGT	TTTTAAAAAG	AGTAATTCCA	TTTAAATATC	TGTTATTCAA	ATTTGATGAT	4320
	GTAAAAATGA	ATATAATGTA	TTTTCTTTTT	ATTTTGCACT	CTGTAAATTC	ACTTTTAAAG	4380
	TTTGAAGAGC	CATTTTGTGA	AAAGGTTTTT	ATTAAGATG	CTATGGAAAC	TAAAGTTGTA	4440
	TTGCTAGCAA	TTTAAAGTAA	CTTATTTGAC	TATGAATATT	ATCGGATTAC	TGAATTGTAT	4500
	CAATTGTGTT	GTGTTCAATA	TCAGCTTTGA	TATTTGTGTA	CCTTAAGATA	TTGAAGGAGA	4560
55	AAATAGATAA	TTTCAAGAT	ATTATTAATT	TTTATTTATT	TTTCTTGGGA	ATTGAAAAAA	4620
	ATTGAATATA	ATAAAAATGC	ATTGAACATC	TTGCATTCAA	AATCTTCACT	GAC	4673

Seq ID NO: C43 DNA Sequence

Nucleic Acid Accession #: AF011468.1

Coding sequence: 257..1468

60	1	11	21	31	41	51	
	GGGAGACTTG	GGTCTCTGGG	TGCGAGGTGG	GAGCCGACGG	GTGGGTAGAC	CGTGGGGGAT	60
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	CAAGTCCCTC	GTCCGTTTCT	CCGTCCCTGA	GTGTCTCTGG	CGCTGCCCTG	TGCCCGCCCA	180
	GCGCCCTTGC	ATCCGCTCCT	GGGCACCGAG	GCGCCCTGTA	GGATACGCTC	TGTTACTTAT	240
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70	TACAGCTCCA	GTGGAGGTCT	CAAAACGTGT	TCTCTGACT	CAGCAAAATC	CTTGTCAGAA	360
	TCCATTACCT	GTAAATAGTG	GCCAGGCTCA	GCGGGTCTTG	TGTCTTCAA	ATTTCTTCCA	420
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	GCAGAGCAAA	TGCGAGGCAA	CCAGTGTACC	TCATCTGTCT	TCCAGGCCAC	TGAATAACAC	540
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75	ATCAAAACAG	AAAAATGAAG	AATCAAAAAA	GAGGCAGTGG	GCTTTGGGAG	ACTTTGAAAT	660
	TGGTCCCTCT	CTGGGTAAAG	GAAAGTTTGG	TAAATGTTAT	TTGGCAAGAG	AAAAGCAAG	720
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	ACTGTATGTT	TATTTCCATG	ATGCTACCA	AGTCTACCTA	ATTCGTGAAT	ATGCACCACT	900
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	TTATATAACA	GAATTGGCAA	ATGCCCCTGC	TTACTGTCTAT	TGAAAGAGAG	TTATTCATAG	1020
	AGACATTAA	CCAGAGAACT	TACTTCTTGG	ATCAGCTGGA	GAGCTTAAAA	TTGCAGATTT	1080
	TGGGTGCTCA	GTACATGCTC	CATCTTCCAG	GAGGACCACT	CTCTGTGGCA	CCCTGGACTA	1140
	CTTGCCTCCT	GAAATGATTG	AAGTCCGGAT	GCAATGATGAG	AAGGTGGATC	TCTGGAGCCT	1200
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Nucleic Acid Accession #: NM_013372
Coding sequence: 63..617

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10 Seq ID NO: C45 DNA Sequence
Nucleic Acid Accession #: Eos sequence
Coding sequence: 200..2932

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70 Seq ID NO: C46 DNA Sequence
Nucleic Acid Accession #: NM_000584.1
Coding sequence: 75..374

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15	AACATTTAAA ACAGCCAAAA CTCACAGTC AATATTAGTA ATTTCTTGCT GGTGGAACCT 1440
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Seq ID NO: C47 DNA Sequence

Nucleic Acid Accession #: NM_005603.1

Coding sequence: 1..3756

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	GAATGTACAT	GGCAAGTCAA	AGCAAAAGAT	CGCAAGTACC	ACGGAACAAC	TCACCTTATG	240
	AACCACAAAAT	TCTTGTGTAT	TAAGGAGAGT	AAATATGCGA	ATAATGCAAT	TAAACATATC	300
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	GGGCTGCTCG	ACCAGGATGT	GAGTGACAAA	CTGAGCCTCC	GATTCCTTGG	GTATACATA	3060
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Seq ID NO: C48 DNA Sequence
 Nucleic Acid Accession #: XM_044533
 Coding sequence: 238..2751

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Seq ID NO: C49 DNA Sequence
 Nucleic Acid Accession #: NM_007019.1
 Coding sequence: 41..580

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	TAAAGGAGTT	TCTGCCCTCC	CTGAATCAGA	CAACCTTTTC	AAATGGGTAG	GGACCATCCA	240
5	TGGAGCAGCT	GGAACAGTAT	ATGAAGACCT	GAGGTATAAG	CTCTCGCTAG	AGTTCCCCAG	300
	TGGCTACCCCT	TACAATGGCG	CCACAGTGAA	GTTCTCTACG	CCCTGCTATC	ACCCCAACGT	360
	GGACACCCAG	GGTAACATAT	GCCTGGACAT	CCTGAAGGAA	AAGTGGTCTG	CCCTGTATGA	420
	TGTCAGGACC	ATTCCTGCTCT	CCATCCAGAG	CCTTCTAGGA	GAACCCACAA	TTGATAGTCC	480
	CTTGAACACA	CATGCTGCCG	AGCTCTGGAA	AAACCCACAA	GCTTTTAAGA	AGTACCTGCA	540
10	AGAAACCTAC	TCAAAAGCAG	TCACCAGCCA	GGAGCCCTGA	CCCAGGCTGC	CCAGCCTGTC	600
	CTTGTGTCGT	CTTTTAAATT	TTCCCTTAGA	TGGTCTGTCC	TTTTTGTGAT	TCTGTATAG	660
	GACTCTTTAT	CTTGAGCTGT	GGTATTTTIT	TTTGTGTTTT	GTCTTTTAAA	TTAAGCCTCG	720
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25	CGGAGCTGGC	CTCCCAAGCG	TGGGGCGACA	AGCTGCCGGA	GCTGCAATGG	GCCGCGGCTG	240
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	CTGTGAAGCT	GATGACATTC	AGTCCCTCGA	AGCTGAATAT	GTAGATTGCT	TTCTTAATCC	780
35	TGAGCGCTAC	ACTGGATTAG	AGGGACCCAG	TGCTTGGAAA	ATATGGGAATG	TCATCTACGA	840
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	ATATCTTTTA	CAGAGAGCCT	GGTTAGAAAA	GAAATGGGGA	CACAACATTA	CAGAAATTTCA	1080
40	ACAGCGAATT	AATGCAATTT	TGACTGAAGG	AGAAGGTCCA	AGAAGGCTTA	AGAATCTGTA	1140
	TTTTCTCTAC	TTAATAGAAC	TAAGGGCTTT	ATCCAAGGTG	TTACCATTCT	TGAGCGGCCG	1200
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50	AGTGGAAATT	CATTCAAAAG	CATAATAGCA	ATGACAGTCT	TAAAGCCAAAC	ATTTTATATA	1740
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55	TAAATGTGAC	AAGCAATTTA	TAGGAAATG	CTAAGGAGGC	CTCATAAATG	ACCCATAATT	2040
	ACCAACCTAG	AATTTTTCAG	TACATTTAGG	GTTCCTGGAT	TTAGCAAAAT	AAAAATAAGA	2100
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65	ATCATTTGAA	AGTCAATTTAT	AGGCATCATG	CCCTTAAAC	CCTAAATACT	TCAGTGTGTA	2640
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70	GGGCTGAAGT	GATCTTCCCA	CCTCAGCCTC	CCAAGTAGCT	GGGAATACAG	GTGCTGTCGA	2940
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80	Seq ID NO: C51 DNA Sequence Nucleic Acid Accession #: NM_002888.1 Coding sequence: 37..723						
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Seq ID NO: C52 DNA Sequence
Nucleic Acid Accession #: NM_005409.3
Coding sequence: 94..378

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Seq ID NO: C53 DNA Sequence
Nucleic Acid Accession #: FGENESH predicted
Coding sequence: 1..609

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Seq ID NO: C54 DNA Sequence
Nucleic Acid Accession #: NM_002438.1
Coding sequence: 104..4474

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CGCAGCTTGC AACCAGGATG CCGAATCACA GAAATTCOGA TGGGTGTCCG AATCTCAGAT 300
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Nucleic Acid Accession #: NM_024574.2
Coding sequence: 424..2130

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5	CGCTGCCCGG	GGATTCCCCA	GCCTCCGCGG	GCTCCCTACT	CCACTTCGCA	GCAACTTCGG	180
	CGACCCGCGG	CCGCGCGCGC	TGCGCCGCGC	TTGAACTTTG	CTGTGCCGAC	CGCAAAGTTG	240
	GGCACTTCA	CGCGATTGAA	TTTTCTCTTT	TTATCTGCTT	CCGTCCCGCG	CTCCAGGCTT	300
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10	TACACCTAAA	AGGTAITTTCT	TTGTGGTTGA	AGAAGACAA	ACTCCATTAT	CAGTCACAGT	660
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20	TGATAATTCA	GGTAAGAAGC	GCAGTTTCCA	GGCAAGCCTT	TCTCCAAAAC	TGGGGGCTCA	1260
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Nucleic Acid Accession #: BC034229.1
Coding sequence: 373..1422

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Coding sequence: 138..1706

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Nucleic Acid Accession #: NM_005408.1
Coding sequence: 76..372

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GCTTTCAACC  CCCAGGGACT  TGCTCAGCCA  GATGCACTCA  AGCTCCCATC  TACTTGTCTC  180
TTCACTTTA  GCAGTAAGAA  GATCTCCTTG  CAGAGGCTGA  AGAGCTATGT  GATCACCACC  240
AGCAGGTGTC  CCGCAAGGC  TGTCTATCTC  AGAACCAAC  TGGGCAAGGA  GATCTGTGCT  300
GACCCAAAGG  AGAAGTGGGT  CCAGAATTAT  ATGAAACACC  TGGGCCGGAA  AGCTCACACC  360
CTGAGACTT  GAACCTGTCT  ACCCCTACTG  AAATCAAGCT  GGAGTACGTG  AAATGACTTT  420
TCCATTCTCC  TCTGGCTTCC  TCTTCTATCT  TTGGAATAC  TTCTACCATA  ATTTTCAAAT  480
AGGATGCAAT  CGGTTTGTG  ATTCAAAATG  TACTATGTGT  TAAGTAATAT  TGGCTATTAT  540
TTGACTTGT  GCTGGTTTGG  AGTTTATTTG  AGTATTGCTG  ATCTTTTCTA  AAGCAAGGCC  600
GGGTTTGTAT  TCGGTTCCCA  GGGGTTGAGA  GCATGCCCTG  GGGAGTCAIT  GACATGANG  660
GATGCTGCAA  TGTAGGAAGG  ABAGCTCITT  GTGAATGTGA  GGTGTGTCTA  AATATGTTAT  720
TGTGMAAGA  TGAATGCAAT  AGTAGGACTG  CTGACATTTT  GCAGAAAATA  CATTTTATT  780
AAAATCTCCA  AAAAAAAA  840

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Seq ID NO: C59 DNA Sequence
Nucleic Acid Accession #: AK097746.1
Coding sequence: 185..2224

	1	11	21	31	41	51	
5	CTTTCATGAC	AGTAACAAAT	CCAAGATTTT	GGAAAAGCGC	CTACGATATT	TAAATGACCA	60
	CTTCACATAC	AACITATATT	GTAATATATG	CGATCACTA	TTTGAGAGG	ACAAGCTGTT	120
	ATTTTCCTTT	TTATTATGTG	CCAACTCTCT	TCTGGCAAGG	AAAGAGATTG	AATACCAGGA	180
	ACTGATGTTT	CTTTAACTG	GAGGAGTAAG	TCTTAAAGT	GCTGAGAAAA	ATCCTGATCC	240
	AACTTGGCTA	CAGGACAAAA	GCTGGGAGGA	AATCTGTCCG	GCAAGTGAAT	TTCTGCTT	300
10	CAGAGGACTC	AGGCAACATT	TTTGTGAACA	TATATATGAA	TGGCGAGAAA	TCTATGACAG	360
	TAAAGAGCCA	CATATGCTA	AAITTCACG	ACCAATGGAT	AAGAACCTAA	ATGAACACCA	420
	GAAATAATA	ATTCTTCGGT	GTTTAAGACC	TGATAAGATA	ACCCACGCTA	TAACAAACTA	480
	TGTAACAGAC	AAACTAGGGA	AAAAGTTTGT	AGAGCCTCCA	CCATTGTGAT	TGACAAAGAG	540
	TTACTTGGAT	TCAAATTCGA	CCATTCCCTT	AATTTTGT	CTATCTCCAG	GAGCAGATCC	600
15	TATGGCCAGC	CTGCTGAAAT	TTGCAATGA	TAAATCTATG	TCTGSAATA	AGTTTCAAGC	660
	TATTTCCAGT	GGACAGGGAC	AAGGACCGAT	TGCAGCAAAA	ATGATTAAAG	CAGCAATTGA	720
	AGAAGGAAC	TGGGTGTGCC	TACAGAAATG	CCATCTTGCA	GTGTCTTGGG	TGCCCCATGTT	780
	GGAAAAAATA	TGTGAAGATT	TTACTCTGTA	AACCTGTAA	TCATCCCTTA	GGCTTTGGCT	840
	GACAAAGTAT	CCATCTTCAA	AATTCACAGT	AACAATCTTA	CAGAAATGGAG	TAAAAATGAC	900
20	TAATGAACCT	CCACCGGATC	TTCCGCTGAA	TCTCCCTCAA	TCATATCTCA	CTGATCCAGT	960
	TTCTGATCCT	GAGTTTTC	AGGGATGCCG	TGGAAAGGAA	CTGTATTATA	TCAATGAATA	1020
	TGATACAATT	CCATTGTGAAG	CTATATCTTA	CCTGACTGGG	GAGTGTATTT	ATGGAGGAAG	1080
	AGTGACAGAC	GAATGGGACA	GACGTCTTCT	ATTAACCATG	CTGGCTGACT	TTTATAATCT	1140
	GTACATAGTT	GAAACCCCTC	ATTATAAGTT	TTCTCCAGT	GGAAACTATT	TTGCACCTCC	1200
25	TAAAGGCAC	TATGAGCACT	ACATTGAATT	CATTAGAGAA	CTTCCATTTA	CTCAACACCC	1260
	TGAGATATTT	GGATTACATG	AAAACGTTGA	CATCTCCAA	GATCTTCAAC	AAACAAAAAC	1320
	CCCTCTTGAG	TCCTTGCTCC	TCACCCAGGG	AGGCTCCAAA	CAGACAGGAG	CCTCAGGAAG	1380
	TACTGATCAG	ATTGAGATTG	AAATTACCAA	AGATATCCCT	AACAAGCTCC	CTAGTGATT	1440
	CGACATTGAA	TGGCAGCTAC	GGAGATATCC	TGTGAGATAT	GAAGAAAGCA	TGATACTGTT	1500
30	GTATGATCAA	GAAATGAA	GATTTAACAA	TTTAAATATA	ACTATAAGTA	ACACTCTAAG	1560
	GGACCTTGAA	AAAGCTATTA	AGGGTGTGGT	TGTGATGGAT	TCTGCATTGG	AGGCATCTTC	1620
	CAGTAGCTTA	CTTGTTGGAA	AGGTTCCAGA	AAATATGGGC	AAACGTTTCA	ACCCAGGCT	1680
	TAAGCCCTTG	GGAGATTACA	TCACAGATTT	CCTAGCCCGG	TGAACTTTT	TACAGGACTG	1740
	GTATAATTCA	GGAAACCCCT	GTGTGTTTTG	GCTGTGAGT	TTCTTTTCA	CTCAGGCTTT	1800
35	TTTAAGCTGA	GCTATGCGA	ATTATGCCAG	AAAATATACC	ACCCCTATTG	ATTGTCTAGG	1860
	ATATGAATTT	GAGTTTATCC	CATCTGATAC	ATCTGACACA	TCACCAAGAG	ATGGTGTTTA	1920
	TATCCACGGA	CTGTATCTCG	ATGGGCGACG	CTGGGACCGA	GAAAGTGGAT	TGCTTGTCTGA	1980
	ACAAATATCC	AAACTTCTGT	TTGACCTGAT	GCCCATCATA	TGGATAAAAC	CAACTCAAAA	2040
	ATCTCGGATT	ATAAAGTCGG	ATGCCATATG	CTGTCCCTCC	TACAGACAAA	GTGAACGTAA	2100
40	AGGAACCTCT	TCCACTCTCG	GACATTCTAC	TAACTTTGTC	ATTGCAATGT	TGTTAAAAAC	2160
	AGACCAACCT	ACTCGGCACT	GGATCAAGCG	CGGGTTGCT	TTGCTTTGTC	AGTTGGATGA	2220
	CTAAATTGGA	CAAAATTATA	AAACATCCAA	AAGTTT			2256

Seq ID NO: C60 DNA Sequence
Nucleic Acid Accession #: J02761.1
Coding sequence: 14..1159

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50	GAATTCGGT	GCCATGGCTG	AGTCACACCT	GCTGCAGTGG	CTGCTGCTGC	TGCTGCCAC	60
	GCTCTGTGGC	CCAGGCACTG	CTGCCTGAGC	CACCTCATCC	TTGGCTGTG	CCCAGGGCCC	120
	TGASTTCTGG	TGCCAAAGCC	TGGAGCAAGC	ATTGCAATGC	AGAGCCCTAG	GGCATTGCTT	180
	ACAGGAAGTC	TGGGAGCATG	TGGGAGCCGA	TGACCTATGC	CAAGAGTGTG	AGGACATCGT	240
	CCACATCCTT	AACAGATGCG	CCAAGGAGGC	CATTTTCCAG	GACACGATGA	GGAAAGTTCT	300
55	GGAGCAGGAG	TGCAACGCTC	TCCCTCTGAA	GCTGCTCATG	CCCCAGTCCA	ACCAAGTGTCT	360
	TGACGACTAC	TTCCCTCTGG	TCATCGACTA	CTTCCAGAAC	CAGACGAGCT	CAAAAGGCTAT	420
	CTGTATGAC	CTGGGCTCTG	GCAAAATCCG	GCAGCCAGAG	CCAGAGCAGG	AGCCAGGGAT	480
	GTGAGACCCC	CTGCCCAAA	CTCTGCGGGA	CCCTCTGCGA	GACCTCTGCT	TGGACAGCT	540
	OGTCTCCCT	GTGCTGCCCG	GGGCGCTCCA	GGCGAGGCTT	GGGCTTCACA	CACAGGATCT	600
60	CTCCAGCAG	CAATTCCTCA	TTCTCTCTCC	CTATTGCTGG	CTCTGCAGGG	CTCTGATCAA	660
	GCGGATCCAA	GCCATGATTG	CCAAGGCTGC	GCTAGCTGTG	GCACTGGCCC	AGGTGTGCTG	720
	CGTGTGACCT	CTGGTGGCGG	GCGGCATCTG	CCAGTGCCCTG	GCTGAGGCTT	ACTGCTCAT	780
	CCTGCTCGAC	ACGCTGCTGG	GCCGCATGCT	GCCCGAGCTG	GTCTGCGGCC	TGCTCCTCG	840
	GTGCTCCATG	GATGACAGCG	CTGGCCCAAG	GTCCCGGACA	GGAGAAATGG	TGCCGCGAGA	900
65	CTCTGAGTGC	CACCTCTGCA	TGTCCGTGAC	CACCCAGGCC	GGGAACAGCA	GCGAGCAGGC	960
	CATACCAAG	GCAATGCTCC	AGGCTGTGTT	TGGCTCCTGG	CTGGACAGGG	AAAAGTGCAA	1020
	GCAATTTGTG	GAGCAGCACA	CGCCCCAGCT	GCTGACCCCTG	GTGCCAGGG	GCTGGGATGC	1080
	CCACACACCC	TGCCAGGCC	TGGGGGTGTG	TGGGACCATG	TCCAGCCCTC	TCCAGTGTAT	1140
	CCACAGCCCC	GACCTTTGAT	GAGAACTCAG	CTGTCCAGCT	GCAGAGGAAA	AGCCAAATGA	1200
70	GACGGGCTCT	GGGACCATGG	TGACCAAGCT	CTTCCCTTGC	TCCTTGGCCC	TGCCAGCTG	1260
	CCAGGCTGAA	AAGAAGCTCT	AGCTCCCA	CCGCTCTCT	CACCTCCCTT	CCTCGGCACT	1320
	CACCTCCACT	GGTGGACCC	GGGCCCCAG	CCCTGTGTCT	GCCTTGTCTG	TCTCAGCTCA	1380
	ACCACAGTCT	GACACCAAG	CCCACTTCCA	TCTCTCTCTG	TGTGAGGCTC	AGCAGAGGCA	1440
	GCATCTGGAG	GAGCTCTGCA	GCCTCCACAC	CTACCAAGAC	CTCCCAAGGC	TGGGCTCAGG	1500
75	AAAAACAGC	CACCTGCTTT	CAGGACAGGG	GGTTGAAGCT	GAGCCCCGCC	TCACACCCAC	1560
	CCCATGAC	TCAAAGATTG	GATTTTACAG	CTACTTGCAA	TTCAAAATTC	AGAGAAATAA	1620
	AAAAATGGGA	CATACAGAAC	TCTAAAAGAT	AGACATCAGA	AATGTATTAG	TTAAGCTTTT	1680
	TCAAAAAATC	AGCAATTCCC	CAGCGTAGTC	AAGGTTGGAC	ACTGCAAGCT	CTGGCATGAT	1740
	GGGATGGCGA	CCGGGCAAGC	TTTCTTCTCT	GAGATGCTCT	GCTGCTTGA	AGCTATTGCT	1800
80	TTGTTAAGAT	ATAAAAAGGG	GTTCCTTTT	GTCTTCTGT	AAGGTGGACT	TCCAGATTTT	1860
	GATTGAAAGT	CCAGGGGTGA	TTCTATTCT	GCTGTGATTT	ATCTGCTGCA	AGCTCAGCTG	1920
	GGGTGTGCA	AGCTAGGGAC	CCATCTCTGT	GTAATACAT	GTCTGCAACA	ATGCTAATAA	1980
	AGTCTATTTC	TCCTTTAAAA	AAAAAAAACG	GAATTC			2026

Seq ID NO: C61 DNA Sequence

Nucleic Acid Accession #: NM_139172.1
Coding sequence: 19..552

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      CTGCAGGGCT CGGCAGACGG AATGGAATC CAGGGATTCT TCTACCCATG GAGCTGTGAG 120
      GGTGACATAT GGGACCGGGA GAGCTGTGGG GGCACAGGCG CCATCGATAG CCCCAACCTC 180
10     TGCCCTGCTC TCCGTGCTG CTACCCCAAT GGGGTCTGCT ACCACCAGCG TCCAGACGAA 240
      AACGTGCGGA GGAAGCACAT GTGGGCGCTG GTCTGGACGT GCACCGGCTT CCTCTCTCTG 300
      AGCTGCAGCA TCTGCTTGT CTGGTGGGCC AAGCGCGGG ACGTGTCTGA TATGCCCGGT 360
      TTCTTGGCGG GTCCGTGTGA CATGTCCAAG TCCGTCTCGC TGCTCTCCAA GCACCGAGGG 420
      ACCAAGAAGA CGCCGTCCAC GGCACGCGTG CCACTCGCCC TGTCCTAAGA GTCCAGGGAT 480
      GTGGAGGGAG GCACCGAGGG GGAAGGGAGC GAGGAGGGTG AGGAGACAGA GGGCAGGAA 540
15     GAGGAGGATT AGGGAGATCC CCGGGGAGCT GCTCAATACA GATACGCTGG ACG 593

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Seq ID NO: C62 DNA Sequence

Nucleic Acid Accession #: NM_054023.2

Coding sequence: 98..379

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20     1      11      21      31      41      51
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      GGGGACACTT TGTATGGCAA GTGGAACCA C TGGCTTGGTG GATTTTGCTA GATTTTCTG 60
25     ATTTTAAAC TCCTGAAAAA TATCCAGAT AACTGTCATG AAGCTGGTAA CTATCTTCTT 120
      GCTGGTGACC ATCAGCCTTT GTAGTTACTC TGCTACTGCC TTCCTCATCA ACAAGTGCC 180
      CCTTCTGTT GACAAGTTGG CACCTTTACC TCTGGACAC ATTCTTCCCT TTATGGATCC 240
      ATTAAAGCTT CTTCGAAAA CTCTGGGCA T TCTGTGTGAG CACCTTGTGG AGGGGCTAAG 300
      GAAGTGTGTA AATGAGCTGG GACCAAGGCG TTCTGAAGCT GTGAGGAAAC TGCTGGAGGC 360
      GCTATCACAC TTGGTGTGAC ATCAAGATAA AGAGCGGAGG TGGATGGGGA TGGAGATGA 420
30     TGCTCTATTC CTCCCTGCTT GAAACCTGTT CTACCAATTA TAGATCAAT GCCTTAAAT 480
      GTAGTACCC GTGAAAAGGA CAATAAAGC AATGAATACT AAAAAAAAAA AAAAAAAAAA 540
      AAAAAAAAAA 550

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Seq ID NO: C63 DNA Sequence

Nucleic Acid Accession #: FGENESH predicted

Coding sequence: 1..2074

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35     1      11      21      31      41      51
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40     ATGCCCCGTG CTTATGCCCTA TAAAAACGCT GAGACCCTAG CAGGCAGACA CACAAGCAGC 60
      TGGATGTGCA GAGGAGCATA TCAGCGGAGG AACACACGGG CAGCTGGACB TCCAGAGGAA 120
      TGCACGTACA GAAACTGGCA TGCTGGCAGA ACAGCTGGAA TTTGGCTGGG GCAGTTGGAG 180
      GAGAGATGTT CAGATGTGTT CAGAGTTTCT TTCTTCTGGT GGGTTCTGGG TCTGCTGGC 240
45     TCAGAGACGA AGCTGCAGAC CTTCAAGCCA GCCAGGAAAG GGGCTCCAC AGTGCAGCGG 300
      CAGGCTGAAG CGCTCTCAA GTGCCGCCAG AGTGGGCGTC CAGGCAGAGG AGGCGCCGAG 360
      AGCGAGCGAG CAGAGGATGC CAGCATGCTG TCACCTCTCA GTCTGTCAT GCGAACTAC 420
      CCAAGTCTCT CTACCATCCC TCCAGAGAGA TCCTACTCTC CACCGAAT TGCTCACAAG 480
      AGTTACTCTT CGAGCCTTCC AGACATGAAA ATCTCCATGG CAGAACTGG CCCTCCTTG 540
50     GATAGCCTTG ACATCTCTGA GATGGCGAG TCTGGGTGAC CATTTCTTGT GACTCATTTG 600
      TACTTTCTGG GGGTTGTGAC CACTGGGATG GAACAAC TAG ATTTTGAAG AGGACCAAC 660
      ATATTGATG TGCAGATTTA TGTGAAGGAT GAGGTTGGTG TCACAGACCT GCAGTCTGCT 720
      ACTGTCCAGG TAACAGATGT GAAAGAGCCA CCTCAGTTTC AAGGCAACTT GGCAGAGAT 780
      CATCTCCGTG CAGACAGGCC ACATTTCAAT GCTCATAGTC ACAGTACGT GAGGGTAGTG 840
      GCTACTGCTT TGGCCAGGCA CAGGCTTAGA TCTAGCATTG GTTCCCTCTT CTTGGGCAAC 900
55     TTCTGTGTG TGGTGGGCTG CGAGTATTTT CTGATTTCTC CCCCAGAGAG CTTCAGAAAT 960
      TCTGCTAATG GCACCTCTT CTCCACAACA GAATTTGACT TTGAAGCAGG ACACAGAAAT 1020
      TTCCATCTCA TCGTGGAGGT GAGGGACAGT GAGGGCTCTA AAGCTCTCAG AGAGCTCCAG 1080
      GTGAACATCG TGAACCTCAA CGACGAAGTC CCTGCTTTTA CCAGCCGAC ACAGTGTATC 1140
      ACAGTCTCTG AGGAACCTAG TCCAGGAAAC ATCGTGGCCA ATATCACAG GAGGATCCT 1200
60     GATGATGAAG GTTTTCCAG CCACTCTCTC TACAGCATTA CCACTGTAG CAATATTTT 1260
      ATGATAAATC AGTTGACTGG TACAATCCAA GTGGCCCAA GATAGACCG AGATGCAGGT 1320
      GAATGAGAC AAAATCCAC CATTTCCCTG GAAGTTCTAG TGAAGGACAG ACCATATGGG 1380
      GGTGAGGAGA ATCCATCCA GATAACCTTC ATTTGTGAAG AGTCAACGA CAATCTGCTC 1440
      ACATGCCAAA AGTTCACTT CAGATCCAGT CTCCACCTTG CTCTGTGCTC CAAGAGCTG 1500
65     ACCTGGATGG ATACGTATT AGACTGTGTT CATGCTGCTG ATAAAGATAT ACCTGTGACT 1560
      GGGCAATTTA CAAGAGAAAG AGGTTTAATT GGACTTACAG TTCCCATGG CTGGGGAAGC 1620
      CTCACATCA TGCAGAGAG CAAGGAGGAG CAAGTCATAT CTTACATGGA TGGCAGCAGG 1680
      CAAGAGATA GAGCTTGTGT AGGGAAACTC CTCTTATTA AGCCATCAGA TCTCATGAGA 1740
      CTTAGTCACT ATCAGAGAA CAACTCAGGA AAGACTTGCC CCAATGATT CATTTCTCTC 1800
70     TACCAGTCC CTCCACAAC ATGTAGGAAT TCAGAAATCC AGGCCACCAA CAAGAGAGAC 1860
      ACAGCTCTG TCACTGTAC TGTGAACATC CTTGAAGAAA ATGATGAAA GCCAATTGT 1920
      ACTCAAACT CTATTTCCTT GGCCTTCCCA GTGGATCTGA AAGTTGGCAC AAATATTGAG 1980
      AAATTCAGC TGACATGTAC CGACCTTGAT TCCAGCCCCA GATCTTTCG TTATTCCATT 2040
      GGCCAGGTA AGTCAACAA TCATTTCCAC TTCTCTCCCA ATGCTGGTTC CAATGTACA 2100
75     CGCTGTCTG TTACATCTCG CTTTGACTAT GCTGGTGGGT TTGATAAGAT CTGGGACTAC 2160
      AAGCTACTG TCTAAGTAA CTTGATGCTG ACAGGAGAA AGCGGAGGCT 2220
      CTTGTGAGA CAGGAACAGT GACACTGAGT ATTAAGTCA TTCCCCACCC AACCATATC 2280
      ATCACCACGA CCCCAGGCC CAGGGTCACC TATCAGGTCC TGAGGAAAA CGTTTACTCT 2340
80     CCACTGACT GGTACGTGCC GTTTGTGCTC ACTTGGGCT CCAATATGCT TCTGGGTCCT 2400
      CTGTGTACC TGTGTCTCT ATTGGCCAAA GCCATCCACA GACACTGCC CTGCAAGACT 2460
      GGAAGACAA AGCAACCTCT GACAAGAAA GAGAAACGA AGACTGAGA GAGAGAGCTC 2520
      GTGTGGAAA CTATCCAGAT GAACACTATC TTTGATGGAG AAGCCATAGA TCCAGAGCCT 2580
      GAGCAAGCTT CACTCAGCT CTATGCCCTG CTGCCCAGCT GCTGCGACCC TAGTCCAGTA 2640
      ACCCTAAGAA AGTCCAGGT GTGTGGGAG AGTGAAGAGA CCGTCAAGTG TTCGGCCAC 2700

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ATCACACTTC CGGCAAGAT TCCAGTCGAT GACCCAAGGA AACAGGAAAC AGGCCTGCAG 2760
 GGTGATTTTG AGGCTGAGC TCTATGCCCC GCTGTGAAGG TGGTTGTAGG CAGCCCTCAA 2820
 GCTGAACGGT GCATTCGATT GGCTCTCAGT CTGAAAAAGT ACAGTTCTGA TTAA 2874

5

Seq ID NO: C64 DNA Sequence
 Nucleic Acid Accession #: KM_168571.1
 Coding sequence: 155..988

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 15 GGTGAATTGA GACAAATCC CACCATTTC CTGGAAGTTC TAGTGAAGGA CAGACCATAT 240
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 GCCACATGCC AAAAGTTTAC CTTCAGCATT ATGGTGCCGG AAGAAGACAGC CAAGGGGACG 360
 TTGCTTCTTG ACCIAAACAA GTTCTGCTTT GATGATGACA GTGAGGCACC AAACAACAGA 420
 TTCAACTTCA CCATGCCATC TGGAGTGGGG AGCGGCAGCA GATTTTATCA GGATCCAGCT 480
 GGCTCTGGGA AGATTGTGCT GATTGGTGAT CTAGACTACG AAAATCCAAG TAACCTAGCA 540
 20 GCCGGCAATA AATATACGGT GATTAATCCAG GTGCAGGATG TGGCCCCCCC TTAATAATAA 600
 AATAACGTCT ACGTTTATAT CCTAACACAG CCAGAAAATG AGTTTCCCTC CATTTTGTAT 660
 AGGCCATTCCT ATGTATTGTA TGTGTGAGAA AGAAGGCCCG CCCAGGGTCA CCTATCAGGT 720
 CCTGAGGAAA AACGTTTACT CTCCATCTGC ATGGTACGTG CCGTTTGTCA TCACCTTGGG 780
 CTCCATATTG CTTCTGGGTC TCTCGTGTGA CTGCTGCTC CTATTGGCCA AAGCCATCCA 840
 25 CAGACACTGC CCTGCAAGA CTGGGAAGAA CAAGGAACCT CTGACAAAGA AAGGAGAAAC 900
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 30 AGAAGATGAG CTGAGTGGCA AAGCGTGGGC TGAGGATGCT GGTCTGGGTT CCAGAAATGA 1200
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 TGAGGGGATT CAGACATCCA GGGTCAAAAC TGGGATGTTT GACAAATTTT TAAACAATA 1440
 35 GAAAGGGGTT TGATCACATA GTTGGTGTG CTGAATGAT ACAGGAACAT TTTCTATCAG 1500
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 40 AAGTCACCTC AATCTTCTT CAAAGGAAGC AGAACAAGTA AAAAAACAGA TGAGTAAGTT 1800
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 45 ACTACAGGCA GGCATGATG GCTCATGCC TTAATGCCAG CACTTTGCCA AGGTGGGCAG 2100
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 50 AAGTGAATTA CAACACT 2357

Seq ID NO: C65 DNA Sequence
 Nucleic Acid Accession #: NM_005266.3
 Coding sequence: 122..1198

55

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 GGTAGGCAAG GTCTGGCTCA CTGTCTCTTT CATATTCGCT ATGCTCGTGC TGGGCACAGC 240
 TGCTGAGTCT TCCCTGGGGG ATGAGCAGGC TGATTTCGG TGTGATACGA TTCAGCCTGG 300
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 65 GGCATGTCAG GAGAGAGGCA AGCTACGGGA GGCCGAGAGG GCCAAGAGGG TCCCGGGCTC 480
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 TGGAGGGAAT GCCCTCCAGG GCACCTGCT CTACACCTAT GTGTGACGCA TCCTGATCCG 600
 CACCAACATG GAGGTGGGCT TCATTGTGGG CAGTACTTTC ATCTACGAAA TCTTCTGAC 660
 CAOCCTGCAT GTCTGCGSCA GGAGTCCCTG TCCCAACCG GTCAACTGTT ACGTATCCG 720
 70 GCCACAGAG AAGATGTCT TCATTGTCTT TATGCTGGCT GTGGCTGCAC TGTCCCTCCT 780
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 ACOGGGGAGC CACATGCTCA AGTGCCAGCT TTCTGGCCCC TCTGTGGGCA TAGTCCAGAG 900
 CTGCACACCA CCCCCGACT TTAATCAGTG CCTGAGAAAT GGCCTTGGGG GAAATTCCT 960
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 75 AGTACAGGAT CAGGAGCAGA CTCTGGGGA AGTTTTCATC CAGTTTCTGT ATGBCAGAA 1080
 GCCTGAGGTG CCCAATGGAG TCTCACCAGG TCACCGCCTT CCCATGGCT ATCATAGTGA 1140
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 80 GTCCCTCTG AACTGATGCT TTCTCACTGT CATCACTGCT TGGCTCCTTT GAGCCCGGG 1320
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 AGGTGACAC CCACCCAGAC TGCAGTCCC TCCCCACCT CTACCCAGTA TACGAAGCCT 1440
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5	AAAGTTCCTCA	GCCAAATAGAC	AGCATGAATC	AAGGAACCTTG	CATTATATGT	GCTCTTGAAT	1680
	CTGTGTCTTC	CATGACCAAT	TCCTCGGAGT	AGTGGTGAGA	TGGCCTTGGG	TTGCCCTTGG	1740
	CTTCTCCTCC	CTCTACTCAT	CCTTAAAGAG	GGCTTCTTGG	AACCTTACCA	GCAGCCTCAG	1800
	CTTTACAAAT	GCCTTGGTAT	GTACCTCTGG	CAAAATGCCCT	GGTATGTACC	TCTGGCAAAAT	1860
	GCCCCACCTT	GGTGATGTGG	CAACCTTTCC	TTCTGCTAGG	GTGTACACCT	AGCCTGTGCA	1920
	GGTGTACGCC	CTGCTAGGGA	GTCACTGTAC	ACACAAACTC	TACTGGAATT	CCTGCCAACA	1980
	TCTGTACCCC	TGCAGCTCCT	TTACAGTTCA	ATCCAATGAT	AGAAACCATC	CCTTCCCTTT	2040
	CTCCCTTGGC	TGTTACCCCA	GCCATTCCCT	GAAGGCCTTA	CCAACAGGAA	TATCCAAGAA	2100
10	GCTGTGTGTC	TCTCTCGAAC	CCTGACCAGA	TCATCAGCCA	CTGAGGCCAG	TGGAATTTCC	2160
	CCAGGCCTTG	TTAAAAAATA	AAAAAATAA				2190

Seq ID NO: C66 DNA Sequence
Nucleic Acid Accession #: NM_014459.2
Coding sequence: 738..3407

15	1	11	21	31	41	51	
	GTAGATGCAG	TCCGCCGCGG	CCGCTGCTTC	AGCCAGCAAT	GCAAGATTAG	ATCTCTAAAT	60
20	GCAGCAAAAC	ACTGCCTGAA	AACAGACCGG	CCCGCGCAGC	AAGCAGACAT	TTCCCATCAA	120
	GCTGGGGAAG	CTTCAAAATA	TATCTGTGAC	TCGTCTCTCG	TTGCTCTTCA	TCCCCATCAA	180
	TTTCATCAGC	GGAGCGGAGC	AGCAAGTAAG	AATTTCACTT	TCGGATCTGC	CTAGAGACAC	240
	ACCTCCCTGC	TCCCTCCCCC	ACTCGATGTG	AAGAGTATTG	CGGAGTCTCC	GGGCGGGAGT	300
	AGATTGTGAG	CACCTTAGCG	GGAGCGAGGA	AAACCTACTG	ATTCTTTAGC	TCATTATCAT	360
25	CTCTCCGAGA	CGAGATTTCG	TTCTTATGCG	CTGCCTCATC	GCTCAAGTTT	GAGCCTCCCG	420
	AAGTCCGGGC	GGGAGAGAGC	AAACCCCTGG	CTCACCCCCA	GCCGCAGGAA	GCCACCGCCT	480
	TGCTCCAGCG	CCCTGCGAGT	CTGCTGCACC	GCAGCTTCTC	ACCCAGTGGG	GATGCTGTAG	540
	ATCAACAGAT	TCAGGGAACT	TGAGCAGAAAT	AAGGAGAGAC	CACCGGGTGC	CGCAGCTCGG	600
	GTGCAGAGGG	AAAAAAGGAC	CCATAGACTT	GTGGCTGCGG	TCGGCTGCGG	ACGCTGCGCC	660
	AGGGCCCGAG	CTGGCGCGGC	ACTCCCTCTC	TGGCTCCTCC	AGTCCGATTG	CTCTGCCCCC	720
30	CACCTTACAG	GTCTGGGATG	TACCTTTCCA	TCTGTGCTCG	CTTCTCTCTA	TGGGCCCTCG	780
	CCCTCACTCT	CAAGAACTTC	AACTACTCCG	TGCCGGAGGA	GCAAGGGGCC	GGCACGGTGA	840
	TCGGGAACAT	CGGAGGGGAT	GCTCGACTGC	AGCCTGGGCT	TCGGCCTGCA	GAGCGCGGCG	900
	GCGGAGGGCG	CAGCAGTTCG	GGTAGCTACC	GGGTGCTGGA	GAACCTCCGA	CGGCACCTGC	960
	TGGAGTGAAG	GCAGAGACGC	GGGCTCCTCT	ACACCAAGCA	GCGCATCGAC	CGCGAGTCCC	1020
35	TGTGCCGCCA	CAATGCCAAG	TGCCAGCTGT	COCTCGAGGT	GTTCGCCAAC	GACAAGGAGA	1080
	TCTGCATGAT	CAAGGTAGAG	ATCCAGGACA	TCAACGACAA	CGCGCCCTCC	TTCTCCTCGG	1140
	ACCAGATCGA	AATCGATATC	TCGGAGAAAG	CTGCTCCGGG	CACCGGCTTC	CCCTCAACCA	1200
	GGGCACATGA	CCCCGAGCCC	GGCGAGAAATG	GGCTCCGCAC	CTAAGCTGTC	AAGCGCGAAG	1260
	ATCACGGCCT	CTTTGGACTG	GACGTAAAGT	CCCGCGGCGA	CGGCAACCAAG	TTCCACGAAC	1320
40	TGGTATATCA	GAAGGCTCTG	GACCGCGAGC	AACAGAAATCA	CCATACGCTC	GTGCTGACTG	1380
	COCTGGACGG	TGGGAGGCGT	CCAGGTTCCG	CCACCGTACA	GATCAACGTG	AAGGTGATTG	1440
	ACTCTCAACGA	CAACAGGCCCG	GTCTTCGAGG	CGCCATCCTA	CTTGGTGGAA	CTGCCCGAGA	1500
	ACGCTCGGCT	GGGTACAGTG	GTCAATCGATC	TGAAGCCGAC	CGACGCGGAT	GAAGGTCCCA	1560
45	ATGGTGAAGT	GCTCTACTCT	TTCAAGAGCT	ACGTGCTTGA	CCGGGTGCGG	GAGCTCTTCT	1620
	CCATCGACCC	CAAGACCGGC	CTAATCCGTC	TGAAGGGCAA	TCTGGACTAT	GAGGAAAACG	1680
	GGATGCTGGA	GATTGACGTG	CAGGCGCGAG	ACCTGGGGCC	TAACCTCTATC	CCAGCCCATC	1740
	GCAAAAGTAC	GGTCAAGCTC	ATCGACCGCA	ACGACAATGC	GCGGTCCATC	GGTTTGGCTC	1800
	CCGTGCGCCA	GGGGCGGCTG	AGCGAGGCGG	CCCTCCCGGG	CACCGTCAATC	GCCTGGGTGC	1860
50	GGGTCACTGA	CGCTCACTCT	GGCAAGAAACG	GACAGCTGCA	GTGTGCGGTC	CTAGGCGGAG	1920
	GAGGGACGGG	CGGCGGCGGG	GGCTTGGGCG	GGCCCGGGGG	TTCCGTCCCC	TTCAAGCTTG	1980
	AGGAGAACTA	CGACAACCTC	TACACGCTGG	TGACTGACCG	CCCGCTGGAC	CGCGAGACAC	2040
	AAGACGAGTA	CAACGATGAC	ATCGTGCGCG	GGGACGGGGG	CTCTCCCTCC	CTCAACTCCA	2100
	CCAAGTCGTT	CGCGATCAAG	ATTCTAGACG	AGAAAGGACAA	CCCGGCTCCG	TTCAACCAAG	2160
55	GGCTCTACGT	GCTCTAGGTG	CACGAGAAAC	ACATCCCGGG	AGAGTACCTG	GGCTCTGTGC	2220
	TGCGCCAGGA	TCCCGACCTG	GGCCAGAAAG	GCACCGTATC	CTACTCTATC	CTGCCCTCGC	2280
	ACATGGCGGA	CGTGTCTATC	TACACCTATG	TGCTGTGAA	TCCCAAGAAC	GGGGCCATCT	2340
	ACGCCCCGCG	CTCCCTTTAA	TTCGAGCAGA	CCAAGGCTTT	TGAGTTCAAG	GTGCTTGCTA	2400
	AGGACTCGGG	GGGCGCGCGG	CACCTGGAGA	GCAAGCCGAC	GGTGAGGGTG	ACAGTGCTAG	2460
60	AGTGAATGA	CAACGCGCCA	GTGATCTGTC	TCCCAAGGCT	GCAAGACGAC	ACCGCGGAGC	2520
	TGCAGGTGCC	GCGCAACGCT	GGCTTGGGCT	ATCTGGTGGG	CACGTGTGCG	GGCCTAGACA	2580
	GCGACTTCGG	CGAGAGCGGG	CGTCTCACTT	ACGAGATCGT	GGAGCGCAAC	GACGACCAAC	2640
	TGTTTGAGAT	CGACCCGTC	AGCGCGGAGA	TCCGCAAGCT	GCACCTTTC	TGGGAGGAGC	2700
	TGAACCGCGT	GGTGGAGCTG	GTGGTGAAGG	TGACCGACCA	CGGCAAGCCT	ACCTGTCCG	2760
65	CAGTGGCCAA	GCTCATCATC	CGCTCGGTGA	GCGATCCCT	TCCCGAGGGG	GTACCAAGGG	2820
	TGAATGGCGA	GCAGCAACAC	TGGGACATGT	CGCTGCGGCT	CATCGTGAAT	CTGAGCACTA	2880
	TCCTCATCAT	CCTCTTAGCG	GCCATGATCA	CCATCGCCGT	CAAGTGCAAG	CGCGAGAAC	2940
	AGGAGATCCG	CACCTTACAAC	TGCCGATCG	CCGAGTACAG	CCACCGCGAG	CTGGGTGGGG	3000
	GCAGGGGCAA	GAAGAGAGAG	ATCAACAAAA	ATGATATCAT	GCTGGTGCAG	AGCGAGGTGG	3060
70	AGGAGAGGAA	CGCCATGAAC	GTCAATGAAC	TGGTGAGCAG	CCCTCCCTCG	GCCACCTCCC	3120
	CCATGTACTT	GCATTAACAG	ACCGGCTGCG	CGCTCAGCTC	GCCCGGCTCG	GAGGTGATGT	3180
	ATCTCAAACC	GGCTTCAAC	AACCTGACTG	TCCTCAGGG	GCACGCGGGC	TGCCACACCA	3240
	GCTTCAACGG	ACAGAGGATC	AATGCAAGCG	AGACCCCTGC	CACCTCGGATG	TCCTAATATC	3300
	AGACAGACAA	TTTTCCCGCA	GAGCCCAATT	ACATGGGCGG	CAGGCAGCAG	TTTGTTCAAA	3360
75	GTAATTCAGT	AGCTCCACGT	TTAAGGACCC	AGAAAGAGCC	AGCCTGAGAG	ACAGTGGGCA	3420
	CGGGGACAGT	GATCAGGCTG	ACAGTGACCA	AGACACTAAC	AAAGGCTCCT	GCTGTGACAT	3480
	GTCTGTTAGG	GAGGCATCTA	AGATGAAAC	TACTTCAACT	AAAAGCCATC	CACCTGAACA	3540
	AGAACCCAGAA	GAGTGTGTTA	ATTGCAACAGA	TGAATGCCGA	GTGCTTGGTC	ATTCTGACAG	3600
	GTGCTGGAGT	CCACAGTTCC	CTGCAGCCAA	TCAGGCTGAA	AATGCAGATT	ACCGACACAA	3660
80	TCTCTTTGTA	AAGCTTTTTC	GTACATTTGG	AAAGGACAA	AGCTGCGCTG	AGCCCTCTCC	3720
	CACCTGGGAA	AAGCTTTTTC	GTACATTTGG	AAAGGACAA	AGCTGCGCTG	AGCCCTCTCC	3780
	TGCCAACGTT	AACCTTATTT	TAAAGCCCAA	AGCTGCGCTG	AGCCCTCTCC	TCCAGAGGTT	3840
	CCCTCTCAGC	TCAAGCAGCC	CAACCAAGGC	GTGCTGCGAG	CCTTGCACCT	CAACAAAGG	3900
	CTCCCTGGAT	GCTGTGTAAG	CAAAACCAAG	AGCCCTGGCT	GAAGCAGGCA	GTCACTACTT	3960
	GCCCACTGAC	AGTCAATATC	TGTCACCTAG	TAAAGCAACA	AGAGACCGTC	CCCTCATGGC	4020

5 TCCGATCAG ATGGCAAGGG TCTTGCAGA TGTGCATTCC AGAGCCAGCC GGGATTCCAG 4080
 TGAGATGGGT GCTGTCTCTG AGCAGCTTGA CCACCCCAAC AGGGATCTGG GCAGAGAGTC 4140
 TGTGGATGCA GAGGAAGTTG TGAGAGAAAT TGATAAGCTT TTGCAAGACT CCGGGGAA 4200
 CGACCCCTGTG GCTGTGAGAA AGTGAAAAA AAGGCATTGG CATTTTCTTG 4260
 TCTCTTCTGT TGATTTAAAA ATGATCCCTC CTGGTGATAA CCCATTTTAC AGGGATGAAG 4320
 AAAGACCAAT GCTGCTTTAA GGCCTTTAGT GAACATCTGA AGTGCCCA CAATATGTCT 4380
 TTCCACTGCT GATTTCTTTT TCAGAGATAA CAATGGTTTC GTTTTGACCA AACTGTATT 4440
 AGGACAGAAT TAATGATGCT TAAAGAGAAA AGAAAAAAG AGAGAAGAAA AAGGAGAGAT 4500
 10 GAAAAAGGAG GATGAGGAGA AGAATTACCT TTTGACAATC TGTAGGAAG GTATGCAGTG 4560
 TGAGAACTGA AGTATTTCTG ATCACTCTCA GACTGTCTTC CGTGATTTAT GCTGACTTAA 4620
 CTGTTTACCT ATAAACCCCA TACAAAGCAG GGTCAATAAT TGTGATCTGT GGTGGATTTC 4680
 TAGCAGTCAT CACAGGCTTC TACTGAAAGT CCTGAAAAGA CCTGCACTA GTCCAAGCTA 4740
 CACCAACAT TAACACATAT TTGTGGTAAA CATTTCTGTA TAAAGTTACC TGACACACAT 4800
 15 ATAAACACAA GGAACATTC ATATCATTAG TCGAAAACAA AAACAAAAA AAAACCTTTG 4860
 GTCAATTGTA AGACATCTCA TGTCAIATAA AAGTTAAATG TAAAAAGATA CAGTCCATTT 4920
 TGTCTGCAC ACACGTAGAC TAATTCACGT CAAAAAATA AAAAAA 4966

Seq ID NO: C67 DNA Sequence

Nucleic Acid Accession #: NM_005601.2

Coding sequence: 101..598

20
 25
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1 11 21 31 41 51
 CCCAGGAGTC TGGGTGCACA GCCTCCTTCT CTCGAGATT CAAGAGTCTG ATCAGCAGCC 60
 TCTTCTCTCT CCAGGACCCA GAAGCCCTGA GCTTATCCCC ATGGAGCTCT GCCGGTCCCT 120
 GGGCCTGCTG GGGGGCTCCC TGGGCCTGAT GTTCTGCCTG ATTGCTTTGA GCACCGATT 180
 CTGGTTTGAG GCTGTGGGTC CCACCCACTC AGCTCACTCG GGCCTCTGGC CAACAGGGCA 240
 TGGGGACATC ATATCAGGCT ACATCCACGT GAGCAGAGCC TTGAGCATTA TGGCTGTCT 300
 GTGGGCCCTG GTGTCCGTGA GCTTCTCTGT CCTGTCTTGC TTCCCTCTAC TGTTCCTCCC 360
 AGGCCACGGC CGGCTGTCT CAACCAACGC AGGCTTTGCT GCAGCCATCT CCATGGTGGT 420
 GGGCAATGGC GTGTACACCA GGGAGCGGTG GGACCACTCT CCACACCCCT AGATCCAGAC 480
 CTCTCTCTCC TGGTCTCTCT ACCTGGGCTG GGTCTCAGCT ATCCTCTTGC TCTGTACAGG 540
 TGCCCTGAGC CTGGGTGCTC ACTGTGGCGG TCCCGCTCTT GGCTATGAAA CCTGTGAGC 600
 AGAAGGCAAG AGCGCAAGA TGAGTTTGA GGTGTGATT CCAAGGCTCT CATCTGAGC 660
 CTGGGGAAG TCTGTCTCTA CATTTGCCCG CCCTTCCAGC CCTTCCCTAG CCTCTCTCT 720
 TGTCTCTCTA TTCAATCAAC AAAATTGTGC TGGAAAAA AAAAAAATA AAAAAAATA 780
 AAA 783

Seq ID NO: C68 DNA Sequence

Nucleic Acid Accession #: NM_006433.2

Coding sequence: 129..566

45
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1 11 21 31 41 51
 GTATCTGTGG TAAACCCAGT GACACGGGG AGATGACATA CAAAAAGGTC AGGACCTGAG 60
 AAAGATTAAG CTGAGGCTC CTGCCCCATA AAACAGGGTG TGAAAGGCAT CTCAGCGGCT 120
 GCCCCACCAT GGCTACCTGG GCCCTCTCTG TCCTTGACGC CATGCTCTTG GGCACCCGCT 180
 GTCTGTCTCT CTCTGCTCTG AGCCTTGAGT ACTACGACCT GGCAAGAGCT CCCTGCTGT 240
 ATGAGGAGAA ATCCCTGCCG TGCCCTGGCC AGGAGGGCCC CCAGGGTGAC CTGTTGACCA 300
 AAACACAGGA GCTGGGCGGT GACTACAGGA CCTGTCTGAC GATAGTCCAA AAACCTGAAGA 360
 AGATGTGTGA TAAGCCCAAC CAGAGAGATG TTTCCATGCC TGCCACCCGCT GTGTGTAGGA 420
 CGGGAGGCTC AGCATGGGCC GACCTGTGCA GAAATTTCT GAGGAGGTAT CAGCTAGAG 480
 TTACCCAGGG CCTCGTGGCC GGAGAAACTG CCCAGCAGAT CTGTGAGGAC CTCAGTTGT 540
 GTATACCTTC TACAGGTCCC CTCTGAGGCC TCTCACCTTG TCCTGTGAAA GAACACAGG 600
 CTCTGTCTCT CAGATCCCGG GAACCTCAGC AACCTCTGCC GGCTCTCTG TTCTCTGATC 660
 CAGATCCAC TCTCAGTCT CCTCCCTG ACTCCCTCTG CTGTCTCTCC CTCTCAGGAG 720
 AATAAGTGT CAGCAAG 738

Seq ID NO: C69 DNA Sequence

Nucleic Acid Accession #: NM_002985.2

Coding sequence: 69..344

65
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 75
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1 11 21 31 41 51
 GCTGCAGAGG ATTCCTGCAG AGGATCAAGA CAGCAGTGG ACCTGCACA GCCTCTCCCA 60
 CAGGTACCAT GAAGGTCTCC GGGGAGGCC TGGCTGTCT CCTATTGCT ACTGCCCC 120
 GGGCTCTGTC ATCTGCTCTC CCATATTCTT CGGACACCAC ACCCTGCTGC TTTGCTTACA 180
 TTGCCCCGCC ACTGCCCGGT GCCACATCA AGGAGTATTT CTACACCACT GGCAGTGTCT 240
 CCAACCCAGC AGTCTGCTTT GTCAACCGAA AGAACCCCA AGTGTGTGCC AACCCAGAGA 300
 AGAAATGGGT TGGGGAGTAC ATCAACTCTT TGGAGATGAG CTAGGATGCA GAGTCTTTGA 360
 ACCTGAACCT ACACAAATTT GCCTGTTTCT GCTGTCTCT GTCCCTAGCT GGGAGGCTTC 420
 CCCTCACTAT CCTACCCAC CGCTCTCTTG AAGGGCCAG ATTCTACCAC ACAGCAGCAG 480
 TTACAAAAAC CTTCGCCAGG CTGGAGCTGG TGGCTCACGC CTGTATATCC AGCACTTTGG 540
 GAGGCCAAGG TGGGTGGATC ACTTGAGGTC AGGAGTTCGA GACCAGCTCG GCCAACATGA 600
 TGAAACCCCA TCTCTACTAA AAATACAAA AATTAGCCGG GCCTGGTAGC GGGCGCTGT 660
 AGTCCAGCT ACTGGGAGG CTGAGGCAGG AGAATGGCGT GAAACCCGGA GGCAGGCTTC 720
 GCAGTGAGCT CAGATCGGCC CACTGCATTC CAGCCTGGGC GACAGAGCGA GACTCCGTCT 780
 CAAAAAATA AAAAAAATA AAAATACAA AATTAGCCGG GGTGTGTGCC CCAAGCTGT 840
 AATCCAGCT ACTCGGGAGG CTAAGGCAGG AAAATGTTT GAACCCAGGA GGTGGAGGCT 900
 GCAGTGAGCT CAGATTGTGC CACTTCACTC CAGCCTGGGT GACAAAGTGA GACTCCGTCA 960
 CAACAACAC AACAAAAAGC TTCCCAACT AAAGCCTAGA AGAGCTCTG AGGCGCTGCT 1020
 TTGTCAAAAG GAAGTCTCTA GGTCTGTAGC TCTGGCTTTG CCTTGGCTTT GCCAGGGCTC 1080

TGTGACCCAGG AAGGAAGTCA GCATGCCTCT AGAGGCAAGG AGGGGAGGAA CACTGCACTC 1140
 TTAAGCTTCC GCCGCTCTCA CCCTCACAG GAGCTTACTG GCAAAACATGA AAAATCGGCT 1200
 TACCATTAAA GTTCTCAATG CAACCATAAA AAAAAA 1237

5

Seq ID NO: C70 DNA Sequence
 Nucleic Acid Accession #: NM_022154.2
 Coding sequence: 1381..1722

10

1	11	21	31	41	51	
AGTGTGGTIT	TAGTTTTTCC	TAAGAAGTGG	CGTGGTTTGG	GGCTTTATAT	COGGGAGGAG	60
CATATGTACG	CAATCCTGG	GGCGTTTGCA	AACCCGGATC	CGGGGCGTCT	GGCCCCATGC	120
COGGCCGGGC	GTTTGAGGGC	TACTGCCACG	CAGCGTTTCT	GGAGCCTGCC	GGCTGGTGCC	180
CTGGTGGGCT	TATCTCTGT	CCCTCTTGT	CCTCTTTATC	TCAGGCTCTC	CAGGAGGCCG	240
GGGGGCCCAT	TCCGCTTATC	GCTCCCTCG	GCTACGCTGC	CACTCCAAATG	CCCCGACAGT	300
CGCAGCTGCG	TGTTCTTTCC	AAGGCGCCGG	AGAACCAGGG	CGCTCCCGCG	CCACCTCTGA	360
CTCGGAGCAG	CGCCGAGCAC	TGACGCTCC	GCCCTGGGCG	AAGGACGCCA	GTGCGCCCGC	420
GCGCGTCCCT	CTGCGCGGCA	GCCGCTCGCG	GGCCCTCAAG	GGGAAGCCCA	GGCCAGGATG	480
GCCCCGGGTC	GCGCGGTGGC	CGGGCTCCTG	TGCTGGGGCG	CGCGCGGCTT	CAGGAGGAGT	540
GCGGAGGGCG	CAGGGCTAGC	CTTCAGCGAG	GATGTGCTGA	CGGTGTTCGG	CGCGAATCTG	600
AGCCTGTGCG	CGGCGCGGCT	CDAGCACTTG	CTGGAGCAGA	TGGGAGCCGC	CTCCCGCGTG	660
GGCGTCCCGG	AGCTTGCGCA	GCTGCACTTC	AACCACTGTT	TAACTGCTGA	AGAGATCTTT	720
TCCTTCTATG	GCTTTTCRAA	TGCTACCCRA	ATAACCAAGCT	CCAAATCTCT	TGTCATCTGT	780
CCAGCAGTCT	TACAGCAATT	GAACTTTCAC	CCATGTGAGG	ATCGGCCCAA	GCACAAAACA	840
AGACCAAGTC	ATTGAGAGT	TTGGGGATAT	GGATTCTCTGT	CAGTGACGAT	TATTAACTCT	900
GCATCTCTCC	CTGAGATTGAT	TTTGACTTCA	CTGATAAAGA	AATCTTATTT	CCCAAGATT	960
TTGACCTTTT	TTGTGGGGCT	GGCTATTGGG	ACTCTTTTIT	CAATGCAAT	TTTCCAACIT	1020
ATTCCAGAGG	CATTTGGATT	TGATCCCAA	GTGACAGTT	ATGTTGAGAA	GGCAGTTGCT	1080
GTGTTGGTGG	GATTTTACCT	ACTTTTCTTT	TTTGAAGAAG	TGCTAAAGAT	GTATTAAAG	1140
ACATATGGTC	AGATTTGTCA	TACCCACTTT	GGAAATGATA	ACTTTGGTCC	TCAAGAAAAA	1200
ACTCATCAAC	CTAAGCAATT	ACCTGCCATC	AATGGTGTGA	CATGCTATGC	AAATCCTGCT	1260
GTCCAGAAAG	CTAATGGACA	TATCCATTTT	GATAATGTCA	GTGTGGTATC	TCTACAGGAT	1320
GGAAAAAAG	AGCCAAAGTTC	ATGTACTCTGT	TTGAAGGGCG	CCAACTGTCT	AGAAATAGCG	1380
ACGATTGCGT	GGATGATAAC	GCTCTGCGAT	GCCTTCCACA	ATTTCATCGA	TGGCCTGGCG	1440
ATTTGGGGCTT	CCCTGCACCTT	GTCTCTCCTT	CAGGGACTCA	GTACTTCCAT	AGCAATCCTA	1500
TGTGAGGAGT	TTTCCCAAGA	GTTAGGAGAC	TTTGTGATCC	TACTCAATGC	AGGGATGAGC	1560
ACTGACAAAG	CCTTGCTATT	CAACTTCTCT	TCGTGATGTT	CCTGCTATGT	TGGGCTAGCT	1620
TTTGGCATT	TGGTGGGCHA	CAATTTCTGCT	CCAAATATTA	TATTTGCACT	TGCTGGAGGC	1680
ATGTTCTCT	ATATTTCTCT	GGCAGATATG	TTTCCAGAGA	TGAATGATAT	GCTGAGAGAA	1740
AAGTTAACTG	GAGAAAAAAC	CGATTTTACC	TTCTTCTATG	TTCAGAAATG	TGGAATGTTA	1800
ACTGGAATTC	CAGCCATTCT	ACTCAATTACC	TTGTATGCGG	GAGAAATCGA	ATTGGAGTAA	1860
TAGAAAAATG	AGATGTTGT	TGTTAATAAA	GGCATTTAAT	AGATAAAAAC	ATCTCCAAAA	1920
AGGATTTTGA	AGCTGATCCT	ATTAGTTAA	AAAGATAATT	TGCTTTTCAA	CTGTAGGTCC	1980
AGAAACTAA	TTATTTGGCAT	CAGTCTGTGA	AATAGTCCAT	TATTTGTTGT	TAAAAATGCT	2040
TCAAAAAGGT	TTCACTGTCA	GTCTGAGATG	CCTGGTATAT	AGGAGCCTTT	GGGAAATACT	2100
TATTTTTCAG	TATTTCCATG	ATATTAGATA	TCACCATBAA	GCAAGAGACA	TGCATTCTAT	2160
AATCACTGAG	ACACTCAGAC	TCAGGGGAAA	ATACAGTTA	TATCTGAAA	GCCTTTAAAA	2220
CTCTATGATG	CTGATCAAGA	TTCAAATGGT	TTCAAGAGAG	TTTATTTTCA	ATTAAATTTG	2280
TCTAGTGCIT	TCAGAGGCAA	GTACATCAAA	ATGTAGAAGG	TAAATGTAT	GCAACACTAA	2340
TATAAATTT	TCAGAGTCTT	TAAGGAGCCA	AGAAAAAATA	AGATTCTTCA	CAGCTTTTTC	2400
TTCTGTTTTC	TATTTCAATT	AGGAACCTGC	AGTATTATTT	TGAAAAACAT	TCTAAAAATA	2460
TAGGAGTTAG	GAAATTAATA	AAGTTTGTCT	AGCCCTGCTA	AGTTCAAGCT	TAGAGGCTTA	2520
TCGCTAAGTN	TAACTTCCAC	CAGATTCCAC	GAAAAGCTGG	ATAGCTTTT	TTCTGACTTA	2580
TGTTGTTGTT	GCACCCCTCA	CAATGGGCAG	AACAGTATGT	AAAGCTGGTA	ACACCTCGGT	2640
TTCACTGAC	CATGTGTTTG	CTTTGTGAAG	GTGAAGAATA	TGTTGTTTGA	GAGAAAGATA	2700
TTGGATGTA	TTTTATGCAA	TTTACTTTTA	AAGACAAACA	TAACTATTTA	CCAGAGAAATA	2760
TTTTAATAAA	CTCAAAACAA	CAGCTGGACT	GCTGTACATC	AAGGACAGAT	TAACTGGAAA	2820
ACATAATGTC	CTTATGTGTG	ATTGAGAGCC	ATTGAGAAA	CACPTTCCTT	GTGTTGAGCC	2880
TATACITTTT	CATATGTTAT	ACCTTGAAAA	AAATTTAGCAC	ACCAAGGTTA	TTTTTCTTACC	2940
TTTTATAAAA	GACAGAGCCT	GTCTACTCAT	TTAGAGATA	GAGAAATTTG	GTCTAAATTT	3000
GAACATCCTA	GATTACACT	CCCAAGTCAC	TTAAGGTGAT	TTGATGGTGA	GGAAATGAT	3060
TGACAAAGCC	CAACAATGAT	CTCAGGAATT	ACATTTTCCA	ACAGACCAAA	AAATGTTTTC	3120
ATGTAGCAGC	AATGCAGATT	TGTTGAATAT	TTAATATATA	TTTTAGTATG	TATTTCACTT	3180
TATGACTGAC	AATTAATAAA	TATTTGTTGG	CCAAATAGTA	AACACCTTTT	TGAACCATG	3240
AAAAAA						3246

70

Seq ID NO: C71 DNA Sequence
 Nucleic Acid Accession #: NM_004184.2
 Coding sequence: 188..1603

75

1	11	21	31	41	51	
CGAAAAAAGA	GGGGAAGAGT	ATTAAGAGCC	ATTCTGGGCT	GGGCAAGGCA	CTCTCAGCAG	60
CTCAACTGCC	CAGCGTGACC	AGTGGCCACC	TCTGCGTGT	CTTCCACAAC	CTGGTCTTGA	120
CTCGTCTGCT	GACAAATATC	TCTGACCTCA	GGCCGGCTGT	GAACGTAGTT	CCTGAGAGAT	180
AGCAAAACAT	CCCAACAGTG	AGCCCGGATC	TCTGCTGGAG	CTGTTCAACA	GCATCGGCCA	240
ACAAGGGGAG	CTCGTAAGGT	CCCTCAAGGC	GGGAAATGCG	TCAAAGGATG	AAATTGATTC	300
TGCAGTAAAG	ATGTTGGTGT	CATTAAAAAT	GAGCTACAAA	GCTGCGCGCG	GGGAGGATTA	360
CAAGGCTGAC	TGTCCTCCAG	GGAAACCCAG	ACCTACCACT	AATCATGGCC	CAGATGCCAC	420
AGAAGCTGAA	GAGGATTTTG	TGGACCCATG	GACAGTACAG	ACAAGCAGTG	CAAAAGGCAT	480
AGACTACGAT	AAGCTCATTT	TTCCGTTTGG	AAGTAGTAAA	ATTGACAAAG	AGCTAATAAA	540
CCGAATAGAG	AGAGCCACCG	GCCAAAGACC	ACACCACTTC	CTGCGCAGAG	GCATCTTCTT	600

5	CTCACACAGA	GATATGAATC	AGGTTCTTGA	TGCCTATGAA	AATAAGAAGC	CATTTTATCT	660
	GTACADGGGC	CGGGGCCCCC	CTTCTGAAGC	AATGCATGTA	GCTCACTCA	TTCCATTAT	720
	TTTCAACAAG	TGGCTCCAGG	ATGTATTATA	CGTGCCCTTG	GTCACTCCAG	TGACGGATGA	780
	CGAGAAGTAT	CTGTGGGAAG	ACCTGACCC	GGACCAAGCC	TATGGCGATG	CTGTGAGAA	840
	TGCCAAGGAC	ATCATCGCCT	GTGGCTTTGA	CATCAACAAG	ACTTTCTAT	TCTCTGACCT	900
	GGACTACATG	GGGATGAGCT	CAGGTTTCTA	CAAAAATGTG	GTGAAGATT	AAAAGCATGT	960
	TACCTTCAAC	CAAGTGAAG	GCATTTTCGG	CTTCACTGAC	AGCGACTGCA	TTGGGAAGAT	1020
	CAGTTTTCCT	GCCATCCAGG	CTGCTCCCTC	CTTCAGCAAC	TCATTCCTCC	AGATCTTCCG	1080
10	AGACAGGACG	GATATCCAGT	GCCTTATCCC	ATGTGCCATT	GACCAAGGATC	CTTACTTTAG	1140
	AATGACAAGG	GACGTGCCCC	CCAGGATCGG	CTATCTTAAA	CCAGCCCTGT	TGCACTCCAC	1200
	CTTCTTCCCA	GCCCTGCAAG	GCGCCACAGC	CAAAATGAGT	GCCAGCGACC	CAAACTCTTC	1260
	CATCTTCCCT	ACCACACCGG	CCAAGCAGAT	CAAAACCAAG	GTCAATAAGC	ATGGTTTTC	1320
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	GTCTTTCTATG	TACCTGACCT	TCTTCTCGA	GGACGACGAC	AAGCTCGAGC	AGATCAGGAA	1440
15	GGATTACACC	AGCGSAGCCA	TGCTCACCCG	TGAGCTCAAG	AAGGCACCTA	TAGAGGTTCT	1500
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	CCACCTGATG	GCTTCTGCT	CATGGTAAT	ACTGGGCTG	GCTCTGTAA	GCTGTGTAT	1740
20	GTATTAATA	CTGTTCCTTC	CTGTGAGTTC	CATTATTCT	ATCTCTTATG	GGCAAAGCAT	1800
	TGTGGTAAT	TGGTGCTGGC	TACATTTGCA	TGGTGGGATA	GAGAAATCCA	GCTGTGAGTC	1860
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	TGTCCATGG	AGGACTTCCG	AGGGTTCCAA	GTATACTCTT	AAGACCACT	CTGTTTAAA	1980
25	ATATATATTC	TATGTATGCG	TATATGGAAT	TGAAATGTCA	TTATTTGTAAC	CTAGAAAGTG	2040
	CTTTGAATA	TGATGTGGG	GAGGTTTAT	GAGCACAGA	TGTATTTTCA	CCCATGCCCC	2100
	CTCCCAAAA	GAAATTGATA	AGTAAAGCT	TGTTTATACA	TTTGACTAAG	AAATCACCCA	2160
	GCTTTAAAGC	TGCTTTTAAAC	AATGAAGAT	GAAACAGATT	CAGCAATTTT	GATTAAATTA	2220
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30	AGAAATCAG	CTGCTTCCC	TTGGCACACC	AGTGTCTTCC	TGCCAAATGA	CCCTAGACCC	2340
	TCTGTCTGCG	AGAGTCAGGG	TGGCTTTTCC	CTGTACTGTG	TCGATGCCA	AGGAGTCCG	2400
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	CTGTGCTGTG	TCTGGACCGG	GTGGACTTAG	CTAGGAGGAA	AGTCGAGGCA	GCAGCCCTCG	2520
	AGGCCCTCAC	AGATGTCTAG	GCAGGCCCTCA	TTTCATCAGC	CAGCATGTGC	AGGCCCTGGA	2580
35	GAGCAAGGCC	AAATCTCAGG	GAACTCTCTG	GTGTATGTAT	CTGGGTCTCC	TCTGGAGCAC	2640
	TCTGCCCTCC	TGTCACCCAG	TAGAGTAAAT	AAACTTCTCT	GGCTCTTAAA	AAA	2693

Seq ID NO: C72 DNA Sequence
Nucleic Acid Accession #: NM_004938.1
Coding sequence: 337..4632

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	CGCTCCGACA	CGCCTCCGGA	GGGACCGGGG	GAGCTCCAGC	GGCGCCGGGA	CTGGAGACTG	240
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50	GTGGATGATT	ACTAGACAC	CGCGAGGAA	CTTGGCATG	GACAGTTTGC	GGTGTGTAAG	420
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	AAGGAGATCG	AGCACCCCAA	TGTCAATCAC	CTGCACAGG	TCTATGAGAA	CAGACCGGAC	600
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55	GAATCTTTAA	CTGAGAGGGA	AGCAACTGAA	TTTCTCAAAC	AAATTCTTAA	TGTTGTTTAC	720
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	GACTTTGGAA	ATGAATTTAA	AAACATATTT	GGGACTCCAG	AGTTTGTGCG	TCTGAGATA	900
	GTCAACTATG	AACTCTCTGG	TCTTGAAGCA	GATATGTGGA	GTATCGGGGT	AATAACCTAT	960
60	ATCCTCTTAA	GTCGGGACCT	CCCATTTCTT	GGAGACACTA	AGCAAGAAAC	GTTAGCAAAT	1020
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	TGTTTCTGCG	ATTATCAAGA	CAGGCACGGC	AACTACTCCC	TCCATGTGGC	ATGTAAAGAT	2100
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25	GTCAACCAAG	GCAGGGGCAT	TGAGTCCAG	GTCCGTGGCC	TGAGACGGA	GAAGATCAAG	3960
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55	TAAATTGATA	GGAGGGAACA	TGTCTTAATT	CTTCTGTCCT	GAGAAGCATG	TAATGTTAAT	5760
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Nucleic Acid Accession #: NM_002081.1
Coding sequence: 222..1898

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70	GCTGTGTGCT	CTATATGTGG	GCOCGAGGCG	TGCTGCGCTG	CGCCGCGCGG	GACCGGCGCA	300
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80	GAGAGCTGCG	CTTCCGGGCG	ACCCGTGCGT	TGCTGCGCTG	TGCTCTCTTT	GTGCGAGGCG	900
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Seq ID NO: C74 DNA Sequence
 Nucleic Acid Accession #: BC030205.1
 Coding sequence: 45..878

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Seq ID NO: C75 DNA Sequence
 Nucleic Acid Accession #: NM_001982.1
 Coding sequence: 199..4227

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5	GGCCTGAGTG	TGACCCGCGA	TGCTGAGAAC	CAATACCAGA	CACGTATCAA	GCTCTACGAG	360
	AGGTGTGAGG	TGGTGTATGG	GAACCTTGAG	ATTGTGCTCA	CGGGACACAA	TGCCGACCTC	420
	TCCTTCTCTC	AGTGGATTCG	AGAAGTGACA	GGCTATGTCC	TGTGTGGCCAT	GAATGAATTC	480
	TCCTACTCTAC	CATTGCCCAA	CCTCGCGGTG	GTGCGAGGGA	CCGAGGTCTA	CGATGGGAAG	540
	TTTGCCATCT	TGCTCATGTT	GAACATAAAC	ACCAACTCCA	GCCACGCTCT	GCGCCAGCTC	600
	CGCTTGACTC	AGCTCACCGA	GATTCTGTCA	GGGGGTGTTT	ATATTGAGAA	GAACGATAAG	660
10	CTTTGTGACA	TGGACACAAT	TGACTGGAGG	GACATCGTGA	GGGACCGAGA	TGCTGAGATA	720
	GTGGTGAAGG	ACAATGGCAG	AAGCTGTCCC	CCCTGTCTAT	AGGTTTGCAG	GGGGCGATGC	780
	TGGGTCTCTG	GATCAGAAGA	CTGCCAGACA	TTGACCAAGA	CCATCTGTGC	TCCTCAGTGT	840
	AATGTGCTACT	GCTTTGGGCC	CAACCCCAAC	CAGTGTCTCC	ATGATGAGTG	TGCCGGGGGC	900
	TGCTCAGGCC	CTCAGGACAC	AGACTGCTTT	GCTTGCCTGC	ACTTCAATGA	CAGTGGAGCC	960
15	TGTGTACCTC	GCTTGCCACA	GCCTCTGTCT	TACAACAAGC	TAACCTTTCCA	GCTGGAAACC	1020
	AATCCCCACA	CCAAGTATCA	GTATGGAGGA	GTTTGTGTAG	CCAGCTGTCC	CCATAACTTT	1080
	GTGGTGGATG	AAACATCTCT	TGTGAGGGCC	TGTCTCTCTG	ACAAGATGGA	AGTAGATAAA	1140
	AATGGCTCTC	AGATGTGTGA	GCCTTGTGGG	GGACTATGTC	CCAAAGCCTG	TGAGGGAACA	1200
	GGCTCTGGGA	GCCGCTTCCA	GACTGTGGAC	TCGAGCAACA	TGATGGATT	TGTGAACCTG	1260
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	AGGATCCCTG	CCCTGGACCC	AGAGAAGCTC	AATGTCTTCC	GGACAGTACG	GGAGATCACA	1380
	GCTTACTCTG	ACATCTCCAG	CTGCCCGCCC	CACATGCACA	ACTTCAGTGT	TTTTTCCAAT	1440
	TTGACAACCA	TTGGAGGCGA	AAGCCTCTAC	AACCGGGGCT	TCTCATTTGT	GATCATGAAG	1500
	AACTTGAATG	TCACATCTCT	GGGCTTCCGA	TCCCTGAGG	AAATTAGTGC	TGGGCGTATC	1560
25	TATATAAGTG	CCAATAGGCA	GCTCTGTCTC	CAOACTCTTT	TGAACCTGGC	CAAGGTGCTT	1620
	CGGGGGCCTA	CGGAGAGCGG	ACTAGACATC	AAGCATAATC	GGCGCGCGAG	AGACTGCGTG	1680
	GCAGAGGGCA	AAGTGTGTGA	CCCCTGTGTC	TCCTCTGGGG	GATGCTGGGG	CCCAAGGCGT	1740
	GGTCACTGCT	TGTCTCTGTG	AAATATATAG	CGAGGAGGTG	TCTGTGTGAC	CCACTGTCAAC	1800
	TTTCTGAATG	CGGAGCCTCG	AGAATTGTCG	CATGAGGCCG	AATGCTTCTC	CTGCCACCCG	1860
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	CTTGGCTCGG	GTGTCTTTGG	AACGTGTGAC	AAAGGAGTGT	GGATCCCTGA	GGGTGAATCA	2400
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	ATCTGACAAA	TTGATGTCTA	CATGGTGTATG	GTCAAGTGT	GGATGATTGA	TGAGAACATT	3060
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65	ACTCCAGATG	AAGACTATGA	ATATATGAAT	CGGCAACGAG	ATGGAAGTGG	TCCTGGGGGT	4020
	GATTATGACG	CCATGGGGGC	CTGCCACGCA	TCTGAGCAAG	GGTATGAAGA	GATGAGAGCT	4080
	TTTCAGGGGC	CTGGACATCA	GGCCCCCAT	GTCCATTATG	CCCGCTTAAA	AACTCTACGT	4140
	AGCTTAGAGG	CTACAGACTC	TGCCCTTGAT	AACTCTGATT	ACTGGCATAG	CAGGCTTTTC	4200
70	CCCAAGGCTA	ATGCCACAGG	AAGCTAACCT	CTGCTCCCTG	TGGCACTCAG	GGAGCATTTA	4260
	ATGGCAGCTA	GTGCCCTTAG	AGGGTACCGT	CTTCTCCCTA	TTCCCTCTCT	CTCCAGGCTC	4320
	CCAGCCCCCT	TTCCCACTGC	CCAGACAATT	CCATTCAATC	TTTGGAGGCT	TTTAAACATT	4380
	TTGACACAAA	ATTCTGTGAA	TATGTAGCCA	GCTGTGCACT	TTCTTCTCTT	TOCCAACCCC	4440
	AGGAAGGTTT	TTCTTATTTT	TGTGTGCTTT	CCCACTCCCA	TTCTCTCAGT	TCTTCAACAG	4500
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75	TGGAACCTAG	CTCTTATGTG	TGCCCTTTGT	TCCCATCAGA	CTGTCAAGAA	GAGGAAGGGG	4620
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	AGAACTTAA	AATCTGTGAA	GAAAGAGGTT	AGGAGTAGAT	ATTGATTACT	ATCATAATTC	4740
	AGCACTTAAC	TATGAGCCAG	GCATCATACT	AAACTTCAAC	TACATTATCT	CACCTAGTCC	4800
	TTATCATCTC	TTAAACCAAT	TCTGTGACAT	ACATATTATC	TCATTTTACA	CAAAGGGAAG	4860
80	TGGGCACTGG	TGGCTCATGC	CTGTAATCTC	AGCACTTTGG	GAGGCTGAGG	CAGAAGGATT	4920
	ACCTGAGGCA	AGGAGTTTGA	GAOCAGCTTA	GCCAACATAG	TAAAGCCCCC	ATCTC	4975

Nucleic Acid Accession #: NM_001216.1
Coding sequence: 43..1422

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TCCCCCTTG GAGGAGGCTC TTCTGGGAA GATGACCCAC TGGGCGAGGA GGATCTGCC 240
10 AGTGAAGAGG ATTCACCCAG AGAGGAGGAT CCACCCGAG AGGAGGATCT ACCTGGAGAG 300
GAGGATCTAC CTGGAGAGGA GGATCTACCT GAAGTTAAGC CTAAATCAGA AGAAGAGGGC 360
TCCCTGAAGT TAGAGGATCT ACCTACTGTT GAGGCTCCTG GAGATCTCA AGAACCCAG 420
AATAATGCCC ACAGGGACAA AGAAGGGGAT GACCAGATC ATGGCGCTA TGGAGGGGAC 480
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15 CGCCCCCAGC TCGCCGCTT CTGCCCGGCC CTGCCCGCCC TGGAACTCCT GGGCTTCCAG 600
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CAGGTCCAGC GACTGACAT ATCTGCACTC CTGCCCTCG ACTTCAGCG CTACTTCAA 1020
TATGAGGGGT CTCTGACTAC ACCGCCCTGT GCCCAGGGT TCATCTGAG TGTGTTTAA 1080
CAGACAGTGA TGCTGAGTC TAAGCAGCTC CACACCTCT CTGACACCT GTGGGAGACT 1140
25 GGTGACTCTC GCTACAGCT GAACCTCCGA GCGACGCAAC CTTTGAATG GCGAGTGATT 1200
GAGGCTTCTC TCCCTGCTGG AGTGGACAGC AGTCTCTGG CTGCTGAGC AGTCCAGCTG 1260
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GTGAGCTACC GCGCAGCAGA GGTAGCCGAG ACTGAGCCT AGAGGCTGGA TCTTGGAGAA 1440
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Seq ID NO: C77 DNA Sequence

Nucleic Acid Accession #: NM_004207.1
Coding sequence: 63..1460

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AGGGCTGCTG TGTCTCTCTC AAGGAGCTCA TACAGGAGTT TGGGATCGGC TACAGCGACA 240
CAGCTCTGAT CTCTCTCATC CTGCTGGCCA TGCTCTAAGG GACAGGTCCG CTCTGAGTGG 300
TGTGGCTGAA CGCTTTGGC TGCGGGCCCG TCATGCTGT GGGGGGTCTC TTTGCTGTC 360
45 TGCGCATGGT GGTGCTGCTC TTTTGGCGA GCATCTCCA GGTCTACCTC ACCACTGGGG 420
TCATCAGGGG GTTGGGTTG GCACTCAACT TCCAGCCCTC GCTCATCATG CTGAACCGCT 480
ACTTCAGCAA GGGCGGCCCT ATGGCCAAAG GGTGGCGGC AGCAGGTAGC CTGTCTTCC 540
TGTGTGCCCT GAGCGGCTG GGGCAGCTGC TGCAAGACCG CTACGCTGCG CCGGGGCGCT 600
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50 TGTGTGTAC GGGCGAGCGG GGTCTGGGGC GCGCGGACC CTCCCGCGC CTGCTAGACC 720
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CCTCGAAAC AAGTGTCTGA GTGGCTGGG GGGGCGGCA GGCACAGGA GGAGGTACAG 1500
AAGCGGCAA GCTTGTCTAT TTATTTTACA AACTGACTG GCTCAGGAG GGCACGGCT 1560
65 GGGCTCCAGC TGCGGGCCA GCGATCTGTC GCGGATCAG TGTTTTGGG GGAAGGTGG 1620
CGGGTGGGA ACCGTGCTAT TCCAGATGG ATCTGCGGTG AAGCCAAAGC GCAAGGTTAC 1680
AAGGATCTT CACGAGGGG CCGCTGCTG GCTCCAGGT GCGCTGCGG CACTGCTATG 1740
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CGCAGACAG GCTGGCAGG CAGGTGCTGC GTGGGCGCT CTCCAGCCG TCTTACCTG 1860
70 GGTCTCATG GGGCTGTGC CCACTCTCT TGAATGCTT GGGGACAGCT CTCTCCACC 1920
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Seq ID NO: C78 DNA Sequence

Nucleic Acid Accession #: NM_000358.1
Coding sequence: 48..2099

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TGCGCTGCTT GGTCTCTGCC CTGGCTCTGG CCTTGGGCC CCGCGGACC CTGGCGGGT 120
CCTCAAGTC GCCCTACAG CTGGTGTGTC AGCAGAGCAG GCTCCGGGG CCGCAGCAG 180
GCCCAAGCT GTGTGCTGT CAGAAAGTTA TTGGACTAA TAGGAAGTAC TTCAACCACT 240

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5	GCAAGCAGTG	GTACCAAAAG	AAAATCTGTG	GCAATCAAC	AGTCATCAGC	TACGAGTGCT	300
	GTCTGGGATA	TGAAAAGGTC	CCTGGGGAGA	AGGGCTGTCC	AGCAGCCCTA	CCACTCTCAA	360
	ACCTTTACGA	GACCTTGGGA	GTCTTGGAT	CCACCACCAC	TCAGCTGTAC	ACGGACCBCA	420
	CGGAGAAGCT	GAGGCTCTGAG	ATGGAGGGGC	CCGGCAGCTT	CACCATCTTC	GCCCTTAGCA	480
	ACGAGGCCTG	GGCCTCCTTG	CCAGCTGAAG	TGCTGGACTC	CCTGGTCAGC	AATGTCAACA	540
	TTGAGCTGCT	CAATGCCCTC	CGCTACCATA	TGCTGGGCAG	GCGAGTCCTG	ACTGATGAGC	600
	TGAAACACGG	CATGACCCCT	ACCTCTATGT	ACCAGAAATC	CAACATCCAG	ATCCACCACCT	660
	ATCTTAATGG	GATTGTAACCT	GTGAACTGTG	CCGGGCTCCT	GAAAGCCGAC	CACCATGCAA	720
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	AGATCATTGA	GATCGAGGAC	ACCTTTGAGA	CCCTTGGGGC	TGCTGTGGCT	GCATCAGGGC	840
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	ACCTGCTGAA	CAACCAATC	TTGAAGTCAG	CTATGTGTGC	TGAAGCCATC	GTTCGGGGGC	1020
15	TGCTGTGAGA	GACCTGGAG	GGCACBACAC	TGGAGGTGGG	CTGCAGCGGG	GACATGCTCA	1080
	CTATCAACGG	GAAGCGGATC	ATCTCCAATA	AAGACATCCT	AGCCACCAAC	GGGGTGATCC	1140
	ACTACATTGA	GCTGAACTTC	ATCCCAAGCT	CAGCCAAGAC	ACTATTTGAA	TGGCTGCGAG	1200
	AGTCTGATGT	GTCCACAGCC	ATTGACCTTT	TCAGACAAGC	CGGCTCGBG	AATCATCTCT	1260
	CTGGAAGTGA	GCGGTTGACC	CTCTGGCTC	CCCTGAATTC	TGTATTCAAA	GATGGAACCC	1320
20	CTCCAAATTGA	TGCCCATACA	AGGAAATTTC	TTCCGGAACCA	CATATTTAAA	GACCAGCTGG	1380
	CCCTCTAAGTA	TCTGTACCAT	GGACAGACCC	TGGAAGTCTT	GGGCGGCAAA	AAACTGAGAG	1440
	TTTTTGTGTA	TGCTAATAGC	CTCTGCATTC	AGAACAGCTG	CATCGCGGGG	CAOGACAAGA	1500
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25	CAGGACTGAC	GAGAGCCCTC	AACCGGGAAG	GAGTCTACAC	AGTCTTTGCT	CCCAAAATG	1680
	AAGCCTTCGG	AGCCCTTGCA	CCAAAGAAAC	GGAGCAGACT	CTTGGGAGAT	GCCAAGGAAC	1740
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	CCCTGGTGGG	GCTAAAGTCT	CTCCAGAGTG	ACAAGCTGGA	AGTCAGCTTG	AAAAACATG	1860
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Seq ID NO: C79 DNA Sequence
Nucleic Acid Accession #: NM_006536.2
Coding sequence: 109..2940

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	GGATGCACCT	TTATCTACAA	TAGCAACCAA	AATGCAACTG	CATCAATAT	GTTTCATGCA	840
65	AGTTTATCTT	CTGTGGTTGA	ATTTTGTAA	GCAAGTACCC	ACAACCAAGA	AGCAACCAAC	900
	CTACAGAAC	AGATGTGCG	CCTCAGAAAT	GCATGGGATG	TAATCAGAGA	CTCTGCTGAC	960
	TTTACCTACA	GCTTTCCCAT	GAATGGGACT	GAGCTTCCAC	CTCCTCCAC	ATTCTGCTT	1020
	GTACAGGCTG	GTGACAAAGT	GGTCTGTTTA	GTGCTGGATG	TGTCACAGCA	GATGGCAGAG	1080
	GCTGACAGAC	TCCFTCAACT	ACAAACAAGC	GCAGAAATTT	ATTTGATGCA	GATTGTTGAA	1140
70	ATTCTATACCT	TCTGGGGCAT	TGCCAGTTTC	GACAGCAAGG	GAGAGATCAG	AGCCCAAGTA	1200
	CACCAAAATTA	ACAGCAATGA	TGATCGAAAG	TTGCTGGTTT	CATATCTGCC	CACCACTGTA	1260
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75	CTGGGTTTCT	CTGCAGCCCC	AAATCTGGAG	GAATTATCAC	GTCTTACAGG	AGGTTTAAAG	1500
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	AAACCTCAC	ATCAATTTGA	AAACACAGTG	ACTGTGGATA	ATACTGTGGG	CAACGACACT	1680
	ATGTTTCTAG	TTACGTGGCA	GGCCAGTGGT	CCTCCTGAGA	TTATATTAAT	TGATCTCGAT	1740
80	GGACGAAAT	ACTACACAAA	TAATTTTATC	ACCAATCTAA	CTTTTCGGAC	AGCTAGTCTT	1800
	TGGATTCCAG	GAACAGCTAA	GCTTGGGCAC	TGGACTTACA	CCCTGAACAA	TACCCATCAT	1860
	TCTCTGCAAG	CCCTGAAGAT	GACAGTGAOC	TCTCGCCCTT	CCAACCTCAG	TGTGCCCCCA	1920
	GCCACTGTGG	AAGCCTTTGT	GGAAGAGAGC	AGCCTCCATT	TTCTCTATCC	TGTGATGATT	1980
	TATGCCAATG	TGAACAGGGG	ATTTTATCCC	ATCTTAAATG	CCACTGTAC	TGCCACAGTT	2040
	GAGCCAGAGA	CTGGAGATCC	TGTTACGCTG	AGACTCCTTG	ATGATGGAGC	AGGTGCTGAT	2100

65	1	11	21	31	41	51	
	ATGAAGTTTC	TTCTAACTACT	GCTCCTGCAG	GCCACTGCTT	CUGGAGCTCT	TCCCTCGAAC	60
	AGCTCTACAA	GCCTGCAAAA	AAATAATGTG	CTATTGGTG	AAAGATACCT	AGAAAATATT	120
	TAGTGGCTTG	GACATAAACAA	ACTTCCAGTG	ACAAAATGA	AATATAGTGG	AAACTTAATG	180
70	AAGGAAAAAA	TCCAGAAAT	CGACAGCTTC	TCGGCTCTGA	AAGTGACCGG	GCACTGGAC	240
	ACATCTACCC	TGGAGATGAT	CGACGACCTT	CGATGTGAGT	TCCCGGATGT	CCATCATTTT	300
	AGCGAAATCG	CAGGGGGGCC	CGTAGGACCT	AAACATGGA	TCACCTACRG	AATCAATAAT	360
	TACACACCTG	ACATGAAACG	TGAGGATGTT	GACTACGCAA	TCCGGAAGC	TTTCCAGTA	420
	TGGAGTAAT	TACCCCTCTT	GAATTTACG	AGGATTAACA	CAGGCTAGCC	TGCATTTTG	480
75	GTGGTTTTTG	CCCGTGAGC	CTATGAGAC	TTGCATGCTT	TTGATGCGAA	TGGTGGAAAT	540
	CTAGCCCATG	CTTTTGGACC	TGAGATCTGC	ACTTGGTGCG	ATGCACATT	CGATGAGGAC	600
	GAATTTCTGA	CTACATATC	AGGAGGACCA	AATTTGTTC	TCAGTCTGT	TCACGCCATT	660
	GGCCATTCCT	TAGGTCTTGG	CCATTCATG	GATCCAAAGG	CGTAAATGTT	CCCACCTAC	720
	AAATATGTTG	ACATCAACAC	ATTTCCGCTC	TTCGCTGATG	ACATACCTGG	CATTCACTCT	780
80	CTGTATGGAG	ACCCAAAGA	GAACCAAGC	TTGCCAAATC	CTGCAAAATC	AGBACAGCT	840
	CTCTGTGACC	CGAATTTTGA	CTTGTAGCT	GTCACACGG	TGGGAAATAA	GATCTTTTTC	900
	TTCAAGACA	GGTTCTTCTG	CTCGAAGGTT	TCTGACAGC	CAAGAGCCAC	TGTTAATTTA	960
	ATTTCTTCTG	TATGGCCAAC	CTTGCCATCT	GCCATTGAAG	CIGCTTATGA	AATTGAAGCC	1020
	AGAAATCAAT	TTTTTCTTTT	TAAAGATCT	AAATACCTGGT	TAAATTGACAA	TTTAAAGACCA	1080
	GAGCCAAATT	ATCCCAAGAG	CATACATCTC	TTTGCTTTTC	TAATTTTGTG	GAHAAAAAAT	1140

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Seq ID NO: C82 DNA Sequence
 Nucleic Acid Accession #: NM_006952.1
 Coding sequence: 11..793

1 11 21 31 41 51
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 ATCTGACCAA CACAGCTCTT ACCCACTGCT TGAAGCCACC GACAACGATG ACATCTATGG 180
 GGCTGCCTGG ATCCGCATAT TGTGGGCAT CTGCTCTTC TGCCTGTCTG TTCTAGGCAAT 240
 TGTAGGCATC ATGAAGTCCA GCAGGAAAAT TCTTCTGGCG TATTTCATTC TGATGTTTAT 300
 AGTATATGCC TTTGAAGTGG CATCTTGAT CACAGCAGCA ACACAACGAG ACTTTTTCAC 360
 ACCCAACCTC TTCTCTGAAG AGATGCTAGA GAGGTACCAA AACACAGCC CTCCAAACAA 420
 TGATGACCAE TGGAAAAACA ATGGAGTCA CAAAACCTGG GACAGGCTCA TGCTCCAGGA 480
 CAATTGCTGT GCGTAAATG GTCCATCAGA CTGGCAAAAA TACACATCTG CCTTCGGGAC 540
 TGAGAAATAT GATGCTGACT ATCCCTGGCC TCGTCAATGC TGTGTTATGA ACAATCTTAA 600
 AGAACCTCTC AACCTGGAGG CTGTAAACT AGGCGTGCCT GGTTTTATC ACAATCAGGG 660
 CTGCTATGAA CTGATCTCTG GTCCAAATGA CCGACACGCC TGGGGGGTGG CCTGTTTGG 720
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 AATTGAATAT TAAGAA 796

Seq ID NO: C83 DNA Sequence
 Nucleic Acid Accession #: NM_001793.2
 Coding sequence: 71..2560

1 11 21 31 41 51
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 CTGGCTGCAE TGGCGGGGCT CGAGCCGCTG CGCGCGGCTC TTCAGGGAGG CTGAAGTGAC 180
 CTTGGAGGGG GGAGGCGCGG AGCAGGAGCC CGGCCAGGG CTGGGGAAAG TATTTCATGG 240
 CTGCGCTGGG CAAGAGCCAG CTCTGTTTAG CACTGATAAT GATGACTTCA CTGTGCGGAA 300
 TGGGAGAGCA GTCCAGGAAA GAAGGTCACT GAAGGAAAGG AATCCATTGA AGATCTTCCC 360
 ATCCAAACGT ATCTTACGAA GACACAAGAG AGATTGGGTG GTTGCTCCAA TATCTGTCCC 420
 TGAAATGGC AAGGTCCTCT TCCCTCAGAG ACTGAATCAG CTCAGTCTA ATAAAGATAG 480
 AGACACCAAG ATTTTCTACA GCATCACGGG GCGGGGGCA GACAGCCGCC CTGAGGGTGT 540
 CTTGCTGTGA GAGAGAGAGA CAGGCTGGTT GTTGTGAAT AAGCCATGG ACCGGGAGGA 600
 GATTGCAAG ATCCAGCTCT TTGGCCACGC TGTGTCAAG AATGGTGCCT CAGTGGAGGA 660
 CCCCATGAAC ATCTCCATCA TCGTACACGA CCAGATGAC CACAAGCCCA AGTTTACCCA 720
 GGACACCTTC CGAGGGAGTG TCTTAGAGGG AGTCTACCA GGTACTTCTG TGATGCAGGT 780
 GACAGCCACG GATGAGGATG ATGCCATCTA CACCTACAT GGGGTGGTGG CTTACTCCAT 840
 CCATAGCCAA GAACCAAGG ACCCACACGA CCTCATTTTC ACCATTCAAC GGAGCACAGG 900
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 GCTGAGAAAT GCAATGGGCC ATGAGGTGCA GAGGCTGACG GTCACTGATC TGGACGCCCC 1140
 CAACTACCA CGGTGGCGTG CCACCTACCT TATCATGGGC GGTGAAGAGG GGGACCATTT 1200
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 GCTGAAGCTC CAACTCTCA CAGCCACCAT AGTGGTCCAC GTGGAGGATG TGAATGAGG 1380
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 GCCTGTGTGT GTCTACACTG CAGAAGACCC TGACAAGGAG AATCAAAAGA TCAGCTACCG 1500
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 ACTGATGAT GTCAATGACC ATGGCCAGT CCTGAGCCC CGTCAGATCA CCATCTGCAA 1740
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 CCTTTTCCAG GCCAGCTCA CAGATGACTC AGACATCTAC TGGACGGCAG AGGTCAAGA 1860
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 CCTGTGCTG GGGCTGTCT TGGCTCTGCT GTTCTCTCTG CTGGTGTCTC TTTTGTGTT 2100
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 GCTCCACCGA GGTCTGGAGG CAGGGCCGGA GTTGGTCTC CGCAATGAG TGGCACCAAC 2280
 CATCATCCCG ACACCCATGT ACCTGCTCTG GCCAGCCAC CCAGATGAAA TCGGCACTT 2340
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 ACGTTAGAG GTTGTCTTCC TIAGCCTTTC AGGATGGAGG AATGTGGGCA GTTGTACTTC 2760
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 TACAGTGGAC TTTCTCTCTG GAATGGAACC TTCTTAGGCC TCTGTTGCA ACTTATTTT 2940
 TTTTITTAAT GCTATCTTCA AAAGCTTAGA GAAAGTCTT CAAAGTGCA GCCAGAGCT 3000
 GCTGGGCCCA CTGGCCGCTC TGCAATTTCT GTTCCAGAC CCAATGCCA CCATTCGGA 3060

TGGATCTCTG CGTTTTTATA CTGAGTGTGC CTAGGTTGCC CCTTATTTTT TATTTTCCCT 3120
 GTTGCCTTGC TATAGATGAA GGGTGAAGAC AATCGTGTAT ATGTACTAGA ACTTTTTTAT 3180
 TAAAGAAACT TTTCACGAA AAAA 3205

5

Seq ID NO: C84 DNA Sequence
 Nucleic Acid Accession #: NM_005629.1
 Coding sequence: 639..2546

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 CCGCGCCCGG GAAGGAGAGG GCGAGGCGCG CCGAGCGCGC GCGCGCGCGC GCCACCGCCG 120
 CCGCGCCCGC CACCGCCACC GAGTCTGCGG GCGAGCGCGG CAGCCTCCGC GGGCGCGCGC 180
 CCGCGCGCGG GCGCGCGCGC ACAGGCCCTT GCTCCGCGCG TCGTTTGCAG ACCGCGGGCG 240
 15 CGATGTGCGC CCGCGCGCGC TTAGGATGAG TCTCGGCTCG GCGGAGGAGC CGCGCGAGCC 300
 GCGCGCGCGC GAGCGCGCGG CAGGAGCCTC GGGAGCGCGC GCGCGCGCGC CCGCGCGCGC 360
 GCGCGCGCGC GCGCGCGCGC GCGCGCGCGC GCGCGCGCGC CACACATGAG ATTCTTCAGG 420
 CTCACCTTCA AGTGTCTTGT GACTGCTTTC TGAATGCGCC GCGCGCGCGC CGCACCCGCG 480
 CGTCCGCGCG CCGCGCGCGC CCGCGCGCGC GCGCGCGCGC GCGCGCGCGC CGCGCGCGCG 540
 20 CTTCCGCGCG CTTCCGCGGTG CCGCGCGGTG CCGCGCGGTG ACCCGCGCGC CCCGTGAGGC 600
 CCGCGCGAGC CGCGCGCGCG GTGCGCGCGC CCGCGCGCGC GCGGAGAGAG AGCGCGAGAG 660
 ACGGCATCTA TAGCTGTGTC GCGGACGAGA AGAAGGCGCC CCTCATGCGC CCGCGCGCGC 720
 ACGGGGCGCC GCGGAGGAGC GAGCGCGCGC TGGGCGCTGG GACACCGCGC GCGCGCGCGC 780
 CGGTGCGCGC GCGGAGGAGC TGAAGCGCGC AGATGGACTT CATCATGTGC TGGTGGGGCT 840
 25 TGGCGGTGGG CTTGGGCAAC GTGTGGCGCT TCCCTTACCT GTGCTACAG AACGCGCGAG 900
 GTGTGTTCCT TATTCCTTAC GTCTGTATCG CCTGGTTGG AGGAATCCCC ATTTCTTCT 960
 TAGAGATCTC GCTGGGCGCG TTCTATGAGG CCGGCGAGCT CAATGTCTGG AACATCTGTC 1020
 CCTGTCTCAA AGCGCTGGGC TACGCGCTCA TGGTGTATCG CTCTACTGAC AACACCTACT 1080
 ACATCATGCT GCTGCGCTGG GGCTTCTATT ACCTGGTCAA GTCCCTTACC ACCAGCTGCG 1140
 30 CTTGGGCGAC ATGTGGCGAC ACCTGGAACT CTCCGACTG CGTGGAGATC TTCCGCCATG 1200
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 CAGGGGCGCT CAACTGGGAG GTGACCCCTT GTCTGCTGCG CTGCTGGGTG CTGGTCTACT 1380
 TCTGTGCTCG GAAGGGGGTC AAATCCACCG GAAAGATCGT GTACTTCACT GCTACATTOC 1440
 35 CTTAGGTGCT CTTGTGCTG CTGCTGTGTC GTGGAGTGTG GCTGCTGCTG GCGCTGGATG 1500
 GCATCAITTA CTATCTCAAG CCTGACTGGT CAAAGCTGGG GTCCCTCAG GTGTGGATAG 1560
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 40 ACAGTGGGAC GCTGCTCTTC GTGCTCTTTC TGTGCTTCTC CATCTGCGCG TTCTGGGCTG 1740
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 GCTCTCTCGA CTTCTCTCCG GCGCTCTACT ACTTCCGTTT CCAAGGCGAG ATCTCTGTGG 1980
 45 CCGCTCTGTC TTGTCTATCG ATCTCTCCAT GGTGACTGAT GCGCGGATGT 2040
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 50 ACACACCTTA CACCGTGGG TGGTGGGGTG AGGCGATGGG CTGGGCGCTT GCGCTGTCTT 2340
 CCAATGCTGT CGTGCGGCTG CACTCTCTGG GCTGCTCTCT CAGGGGCAAG GGCACCATGG 2400
 CTGAGCGCTG CGAGCAGCTG ACCGAGCCCA TCTGGGCGCT CCACTACTTG GAGTACCGAG 2460
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 55 GCGTAGCAG CACCTGCTTC AGCCCGACCG CACCCCTCCA GCGGCGCTCG CTTTCCCTGA 2640
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 TCCCGCTCCA GCGCTAGCGG AGCTGTGCTT AGGCGCGCGC TAGTGCCCA CCGCCACCCA 2820
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 60 CTCTGCAGCA CACCGTGGG TGACCCCTCA CCGCAGAGC AGCAGTGGCA GCTTGGGAAA 2940
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 65 TATAGATCTC TATCTCTTAG CAAAGGTGAA TGCCAGATGT AAATGGCGCC TCNCGGCAAA 3240
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 70 GTCCCGAGCC CCAGACTGGA TTGGAAAAGT GCATGGTGGG GCGCTCGGGG CTGTCCCGAC 3540
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 AAAACATGTC ATTTTCC 3917

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Seq ID NO: C85 DNA Sequence
 Nucleic Acid Accession #: NM_005616.1
 Coding sequence: 180..1658

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5	GTGAGAGTCG	CAGTGGGAGT	CCCOCGACCG	GAGCAGGAGC	CTGAGCGGGA	GAGCGCCGCT	120
	CGCAGCGCCG	TCCGCAACCG	CGTACCOCGC	GCAGCCAGAG	CCACCAGCGC	AGCGCTGCCA	180
	TGGAGCCGAG	CAGCAAGAAAG	CTGACCGGGT	GCCTCATGCT	GGCTGTGGGA	GGAGCAGTGC	240
	TTGGCTCCCT	GCAGTTTGGC	TACAACACTG	GAGTCATCAA	TGCCCCCCAG	AAGGTGATCG	300
	AGGAGTTCTA	CAACCAGACA	TGGGTCCACC	GCTATGGGGA	GAGCATCTTG	CCCACCACGC	360
	TCACCACGCT	CTGCTCCCTC	TCAGTGGCCA	TCTTTTCTGT	TGGGGGCATG	ATTGGCTCCT	420
	TCTCTGTGGG	CCTTTTCGTT	AACCGCTTTG	GCCGSCGGAA	TTCAATGCTG	ATGATGAACC	480
	TGCTGGCCCT	CGTGTCCGCC	GTGCTCATGG	GCTTCTCGAA	ACTGGGCAAG	TCCTTTGAGA	540
10	TGCTGATCCT	GGGCCBCTTC	ATCATCGGTG	TGTACTGCGG	CCTGACCACA	GGCTTCGTGC	600
	CCATGTAATG	GGGTGAAGTG	TCACCCACAG	CCTTTCTGTG	GGCCCTGGGC	ACCCTGCACC	660
	AGCTGGGCGT	CGTCBTGGGC	ATCCTCATCG	CCCAGGTGTT	CGGCCCTGGC	TCCATCATGG	720
	GCACAAGGGA	CCCTGTGCCG	CTGCTGCTGA	GCATCATCTT	CATCCCGGCC	CTGCTGCAGT	780
	GCATCGTGCT	GCCCTTCTGC	CCCGAGAGTC	CCCGCTTCCT	GCTCATCAAC	CGCAACGAGG	840
15	AGAACCGBGC	CAAGAGTGTG	CTAAGAAGTC	TGCGCGGAC	AGCTGACGTG	ACCCATGACC	900
	TGCAGGAGAT	GAAGGAAGAG	AGTCGCGAGA	TGATCGGGA	GAAGAAGGTC	ACCATCTCTG	960
	AGCTGTTCCG	CTCCCCCGCC	TACCGCCACG	CCATCCTCAT	CGCTGTGGTG	CTGCAGCTGT	1020
	CCCAGCAGCT	GTCTGTGGGC	AACGCTGTCT	TCTATTACTC	CACGAGCATC	TTGAGAGAAG	1080
	CGGGGGTGCA	GCACCTCTGT	TATGCCACCA	TTGGCTCCGG	TATGCTCAAC	ACGGCCCTCA	1140
20	CIGTGTGTCT	GCTGTTTGTG	GTCGAGCGAG	CAGGCGCGCG	GACCCCTGCAC	CTCATAGGCT	1200
	TGCTGGGCGT	GGCGGCTGTG	GCCATACTCA	TGACCATCGC	GCTAGCACTG	CTGGAGCAGC	1260
	TACCCCTGAT	GTCTATCTCG	AGCATCTGTG	CCATCTTTGG	CTTTGTGGCC	TTCTTTGAAG	1320
	TGGGTCTGGG	CCCCATCCCA	TGGTTCATCG	TGGCTGAAC	CTTCAGCCAG	GGTCCACGCT	1380
	CAGCTGCGCT	TGCGGTGTGA	GGCTTCTCCA	ACTGGACCTC	AAATTTTCAT	GTGGGCATGT	1440
25	GCTTCCAGTA	TGTGGAGCAA	CTGTGTGGTC	CCTAGCTCTT	CATCATCTTC	ACTGTGCTGC	1500
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	ATGAGATCGC	TTCCGGCTTC	CGGCAGGGGG	GAGCCAGCCA	AAGTGATAGG	ACACCCBAGG	1620
	AGCTGTTCCA	TCCCTCGGGG	GCTGATTTCC	AAGTGTGAGT	CGCCCCAGAT	CACGAGCCCG	1680
	GCCCTGCTCC	AGCAGCCCTA	AGGATCTCTC	AGGAGCACAG	GCAGCTGGAT	GAGACTTCCA	1740
30	AACCTGACAG	ATGTCAGCGC	AGCCGGGCTT	GGGGCTCCTT	TCTCCAGCCA	GCAATGATGT	1800
	CCAGAGGAAT	ATTCAAGACT	TAACGGCTCC	AGGATTTTAA	CAAAAGCAGG	ACTGTTGCTC	1860
	AAATCTATTC	AGACAAGCAA	CAGGTTTAT	AATTTTCTTA	TACTGATTTT	TGTTATTTT	1920
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	GAGGGGTGAG	ACTAAGCCCT	GTGAGACAC	TTGCCCTCTT	CACCCAGCTA	ATCTGTAGGG	2040
35	CTGGACCTAT	GTCTTAAGGA	CACACTAATC	GAACATGAA	CTACAAAGCT	TCTATCCAG	2100
	GAGGTGGCTA	TGGCCACCGG	TTCTGCTGGC	CTGGATCTCC	CCACTCTAGG	GCTCAGGCTC	2160
	CATTAGGATT	TGCCCTCTCC	CATCTCTTCC	TACCAACCA	CTCAAATTA	TCTTTCTTTA	2220
	CCTGAGACCA	GTTGGGAGCA	CTGGAGTGCA	GGGAGGAGAG	GGGAAGGGCC	AGTCTGGGCT	2280
	GGCGGTTCT	AGTCTCTCTT	GCACTGAGGG	CCACACTATT	ACCATGAGAA	GAGGGCTCTG	2340
40	GGGAGCTGCG	AAACTCACTG	CTAAGAAGA	CATGGAGACT	CCTGCCCTGT	TGTTATAGA	2400
	TGCAAGATAT	TTATATATAT	TTTTGGTGT	CATATATAA	TACAGACACT	AAGTTATAGT	2460
	ATATCTGGAC	AAGCCACTTT	GTAAATACAC	CACCTCCTC	CTGTTACTTA	CTTAACACAG	2520
	TATATATGGC	TGGTTTTTAG	AAACATGGTT	TTGAATGCT	TGTGGATTGA	GGGTAGGAGG	2580
	TTTGGATGGG	AGTGAGACAG	AAGTAAGTGG	GGTTGCAACC	ACTGCAACGG	CTTAGACTTC	2640
45	GACTCAGGAT	CCAGTCCCTT	ACAAGTACCT	CTCATCAGTG	TCCTCTTGCT	CAAAATCTG	2700
	TTTGATCCCT	GTTACCCAGA	GAATATATAC	ATTCTTTATC	TTGACATTCA	AGGCATTCTT	2760
	ATCACATATT	TGATAGTTGG	TGTTCAAAAA	AACACTAGTT	TTGTGCCAGC	CGTGATGCTC	2820
	AGGCTTGAAA	TGCAATTATT	TTGAATGTGA	AGGGAA			2880

Seq ID NO: C86 DNA Sequence
Nucleic Acid Accession #: XM_035292.2
Coding sequence: 53..1576

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	GGAGAAGATG	CTGGCCGCCA	AGAGCGCGGA	CGGCTCGGGC	CGGCGAGGCG	AGGGCGAGGG	180
	CGTGACCCCTG	CAGCGGAACA	TCACGCTGCT	CACCGCGCTG	GCCATCATCG	TGGGGAACAT	240
60	TATCGGCTCG	GACATCTTCG	TGACGCGCAC	GGCGTGTCTC	AAGGAGGCGG	GCTCGCGGGG	300
	GCTGGGCGCG	GTGTGTGGGG	CGCGTGGCGG	CGTCTTCTCC	ATCGTGGGCG	CGCTCTGCTA	360
	CGCGGAGCTC	GGCACCACCA	TCTCCAAATC	GGCGGCGGAC	TACGCTTACA	TGCTGGAGGT	420
	CTACGCGCTG	CTGCCGCGCT	TCCTCAAGCT	CTGGATCGAG	CTGCTCATCA	TCGCGGCTTC	480
	ATCAGAGTAC	ATCGTGGGCC	TGGTCTTCGC	CACCTACCTG	CTCAAGCCGC	TCCTCCCCAC	540
65	CTGCCCGGCG	CCCGAGGAGG	CAGCCAGGCT	CGTGGCTTGC	CTCTGGGTGC	TGCTGCTCAC	600
	GGCGGTGAAC	TGCTACAGCG	TGAAGGCGCG	CACCCGGGTC	CAGGATGCGT	TTGCCGCGCG	660
	CAAGCTCCTG	GCCCTGGGCC	TGATCATCCT	GCTGGGCTTC	GTCCAGATCG	GAAAGGGTGA	720
	TGTTGCCAAT	CTAGATCCCA	ACTTCTCAT	TGAAGGCACC	AAACTGGATG	TGGGGAACAT	780
	TGTGCTGGCA	TTATACAGCG	GCCTCTTTGC	CTATGAGGGA	TGGAATTACT	TGAATTTGCT	840
70	CACAGAGGAA	ATGATCAACC	CTACAGAAA	CCGCCCCCTG	GCCATCATCA	TCTCCCTGCC	900
	CATCGTGACG	CTGGGTAGCG	TGCTGACCAA	CCTGGCTTAC	TTCAACACCC	TGTCCACCGA	960
	GCAGATGCTG	TGCTCCGAGG	CCGTGGCCGT	GGACTTCGGG	AACATATACC	TGGGCGTCTT	1020
	GTCTCGGATC	ATCCCGGCTC	TGCTGGGGCT	GTCTTGTCTT	GGCTCGGTCA	ATGGGTCTCT	1080
	GTTTACATCC	TCCAGGCTCT	TCTTCTGTGG	GTCCCGGGAA	GGCCACCTGC	CCTCCATCCT	1140
75	CTCCATGATC	CTGAGGCTCT	TCTTCAACCC	CGTGGCGTCC	CTGCTGTTCA	CGTGTGTGAT	1200
	GACGCTGCTC	TAGGCTCTCT	CCAAGGACAT	CTTCTCGGTC	ATCAACTTCT	TCAGCTTCTT	1260
	CAACTGGCTC	TGCTGGGCCG	TGGCCATCAT	CGCATGATC	TGGCTCGGCC	ACAGAAAGCC	1320
	TGAGCTTGAG	CGGCCATCA	AGGTGAACCT	GGCCCTGCC	GTGTTCTTCA	TCCTGGCTCT	1380
	CTCTCTTCTG	ATCGGCGCTC	CCTTCTGGAA	GACACCCGTC	GAGTGTGGCA	TGGCTTCA	1440
80	CATCATCTCT	AGCGGCTGCG	CCGTCTACTT	CTTGGGGGTC	TGGTGGAAAA	ACAAAGCCAA	1500
	GTGGCTCTCT	CAGGGCATCT	TCTCCACGAC	CGTCCCTGCT	CAGAAAGCTCA	TGCAGGTGCT	1560
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Seq ID NO: C87 DNA Sequence
Nucleic Acid Accession #: NM_005268.1

Coding sequence: 168..989

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TCTTTGAGGG ACTCCTGAGT GGGGTCAACA AGTACTCCAC AGCCTTTGGG CGCATCTGGC 240
TGCTCTGGT CTTCATCTTC GCGGTGCTGG TGTACTGGT GACGGCCGAG CGTGTGTGGA 300
10 GTGATGACCA CAAGGACTTC GACTGCAATA CTGCGCAGCC CGGTGCTCC AACGTCTGCT 360
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GTGGGCTCTG GTGGACATAT GTCTGCAGCC TAGTGTTCAG GCGAGCGTG GACATCCTCT 600
15 TTCTCTATGT GTTCCACTCA TTCTACCCCA AATATATCCT CCTCTCTGTG GTCAAGTGCC 660
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Seq ID NO: C88 DNA Sequence
Nucleic Acid Accession #: NM_005130
Coding sequence: 98..802

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GAATGGACTT CACAGCAAGG TGGTCTCAGA ACAAAGGAC ACTCTGGGCA ACACCCAGAT 240
TAAGCAGAAA AGCAGGCCCG GGAACAAAGG CRAAGTTGTC ACCAAGAGCC AAGCCACTG 300
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GGACCATGAA TTTTCTGTG TCTTGTCTGG CAATCCAAAC TCATGCTTAA AGCTCAAGGA 420
40 TGAGAGAGTG TATTGGAAC AAGTTGCCCG GAATCTGCGC TCACAGAAAG ACATCTGTAG 480
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45 GACTGCCCTG GAGTCTGTG GAGAGACTTG GAGCTCTCTC TGCACTTCT TOCTCAGCAT 780
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Seq ID NO: C89 DNA Sequence
Nucleic Acid Accession #: BC022542
Coding sequence: 274..927

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GECTCAGCGG CGGCGCCGCC ACGGCCTTCA CCGCCGCGCG CTCTGACGCC GGCATAGGG 240
60 CCAATGTGTC TGAATATT TTGAGGCAAG AAGTTTGAA AGATGGTTTC CACAGAGACC 300
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TATGCCAATG GAACAGATG AAGTATAAAT CAGTATATAA GAATGTGATT CTACAAGTTC 780
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70 TGTGCTCTAC AATGACTCCT GTAGCAGTTT TCAAAATAGG CCAATTTTCC CTATAAGTTT 900
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 ACACACTCCA TTCTCTTTT ACATTTTATC ATGTTTCTTT TGAATATATG AATTGGCAA 1800
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 TTGCCATTTT AAATAAGTT GTACATGAAC AAAAAA AAAA 1906

Seq ID NO: C90 DNA Sequence
 Nucleic Acid Accession #: NM_004994
 Coding sequence: 20..2143

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Seq ID NO: C91 Sequence
 Nucleic Acid Accession #: NM_000213
 Coding sequence: 188..5656

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 GGTCTCTGAG CAGCTCACCA GCGACTACAC TATTGGATTT GGCAGTTTG TGGACAAAGT 720
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 75 TAACTGCGAG GAGAGCGGA TCTCAGGCA CCTGGATGCT CCTGAGGCGC GCTTGTATGC 900
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5	GTGTGTGTGC	AGCGAGGGCT	GGAGTGGCCA	GACCTGCRAA	TGCTCCACCG	GCTCTCTGAG	1680
	TGACATTCA	CCCTGCTCTC	GGGAGGCGCA	GGACAAGCCG	TGCTCCGGCC	GTGGGGAGTG	1740
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	TGACAACCTC	CAGTGTCCCC	GCACTTCCCG	GTTCCTGTGC	AATGACCGAG	GACGCTGCTC	1860
	CATGGGCGAG	TGTGTGTGTG	AGCCTGTGTG	GACAGGCCCA	AGCTGTGACT	GTCCCTCCAG	1920
	CAATGCCACC	TGCATCGACA	GCAATGGGGG	CATCTTAAT	GGACGTGGCC	ACTGTGAGTG	1980
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35	TTTCAAGCTC	CAGCTCAGCA	ACCTAAGTT	TGGGGCCAC	CTGGGCGAGC	CCCACTCCAC	3480
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	TGGGTCCAGG	AAGATCCATT	TCAACTGGCT	GCCCTCTTCT	GGCAAGCCAA	TGGGGTACAG	3660
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40	GCCCTCAGTG	GAGCTCAGCA	ACCTGTACCC	GTATTGCGAC	TATGAGATGA	AGGTGTGCGC	3780
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45	TAAAGACCGG	GTGCTGCTTA	TTGAGAACCT	TCGGGAGTCC	CAGCCCTACC	GCTACACGTT	4080
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65	TGAGATGGCT	CAAGGAGGAG	GGCCAGCCAC	CGCATTCGGG	GTGGATGGAG	ACAGCCCGGA	5280
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75	GTCTCTGTGT	GCGCAAAACC	TATTTGTAAC	CAAGAGCTG	GGAGCAGCAC	AAGGACCCAG	5880
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	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA	AAAA		5994

Seq ID NO: C92 DNA Sequence
Nucleic Acid Accession #: NM_023915
Coding sequence: 250..1326

1 11 21 31 41 51
| | | | |
GGCAGAGGG TTTCGTTTTC ATGCTTTACC AGAAATCCA CTTCCTGCC GACCTTAGTT 60

5	15	20	25	30	35	40	45	50	55	60	65	70	75	80
TCAAAGCTTA	TTCTTAATTA	GAGACAAGAA	ACCTGTTTCA	ACTTGAAGAC	ACCGTATGAG	120								
GTGAATGGAC	AGCCAGCCAC	CACAAATGAAA	GAAATCAAAC	CAGGAATAAC	CTATGCTGAA	180								
CCCACGCTC	AATCGTCCCC	AAGTGTITCC	TGACACGCAT	CTTTGCTTAC	AGTGCATCAC	240								
AACTGAAGAA	TCGGGTTCAA	CTTGACGCTT	GCAAAATTAC	CAATAACGA	GCTGCACGGC	300								
CAAGAGAGTC	ACAATTACAG	CRACAGGAGC	GACGGGCCAG	GAAAGAACAC	CACCCCTCAC	360								
AATGAATTG	ACACAATTGT	CTTGCCGGTG	CTTTATCTCA	TTATATTGT	GGCAGCATC	420								
TTGCTGAATG	GTTTAGCAGT	GTGGATCTTC	TTCCACATTA	GGAAATAAAC	CAGCTTCATA	480								
TTCTATCTCA	AAAACATAGT	GGTTGCAGAC	CTCATAATGA	CGCTGACATT	TCCATTTGGA	540								
ATAGTCCATG	ATGCAGGATT	TGGACCTTGG	TACTTCAAGT	TTATTCTCTG	CAGATACACT	600								
TCAGTTTGT	TTATATCAAA	CATGTATACT	TCCATCGTGT	TCCTTGGGCT	GATAAGCATT	660								
GATCGCTATC	TGAAGGTGGT	CAAGCCATTT	GGGGACTCTC	GGATGTACAG	CATAACCTTC	720								
ACGAAGGTTT	TATCTGTTTG	TGTTTGGGTG	ATCATGGCTG	TTTTGTCTTT	GCCAAACATC	780								
ATCCTGACAA	ATGGTCAGCC	AACAGAGGAC	AATATCCATG	ACTGCTCABA	ACTTAAAGT	840								
CCCTTGGGGG	TCAAATGGCA	TACGGCAGTC	ACCTATGTGA	ACAGCTGCTT	GTTCGTGGCC	900								
GTGCTGGTGA	TTCTGATCGG	ATGTTACATA	GCCATATCCA	GGTACATCCA	CAATCCAGC	960								
AGGCAATTCA	TAAGTCAGTC	AAGCCGAAAG	GCAAAACATA	ACCAGAGCAT	CAGGGTTGTT	1020								
GTGGCTGTGT	TTTTTACCTG	CTTTCACCA	TATCACTTGT	GCAGAAATTC	TTTTACTTTT	1080								
AGTCACTTAG	ACAGGCTTTT	AGATGAATCT	GCACAAAAAA	TCCTATATTA	CTGCAAGAA	1140								
ATTACACTTT	TCCTGTCTGC	GTGTAATGTT	TGCCTGGATC	CAATAATTTA	CTTTTTCATG	1200								
TGTAGGTCAT	TTTCAAGAA	GCTGTTCAAA	AAATCAATA	TCAGAACCCG	GAGTGAAAG	1260								
ATCAGATCAC	TGCAAAAGT	GAGAAGATCG	GAAAGTTCGA	TATATTATGA	TTACACTGAT	1320								
GTGTAGGCTT	TTTATGTTT	GTGTGAATCG	ATATGTACAA	AGTGTAAATA	AATGTTTCTT	1380								
TTCAATTATCC	TTAAAAAAA	AA				1402								

Seq ID NO: C93 DNA Sequence
Nucleic Acid Accession #: NM_020789.1
Coding sequence: 208..3699

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1	11	21	31	41	51					
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CCTTGGGTGT	TACATGAGCC	AAGCCCTCAC	TGTACAGAAG	ASTGAGAGCT	GAAACCTCAC	120				
CCCTGAGCTG	ATCAGAGGGA	CATCCCTTGG	CCCTCCATC	TGGGCTCCG	TGGATAGGAG	180				
GGGCTGGGTG	AGCAGGCCAG	CTGGGCTATG	GTGTGGTGCC	TGCGCCTGGC	CGTCTCAGC	240				
CTGGTCATCA	GCCAGGGGGC	TGACGGTGA	GGGAAGCCTG	AGGTGGTATC	GGTGGTGGGC	300				
CGGGCTGAGG	AGAGTGTGGT	GCTGGGCTGT	GACCTGCTGC	CCCCGGCCGG	CCGGCCCCCC	360				
CTGATGTCTA	CCCTGGGCTG	GCGCTTTGGA	TTCCTGCTTC	CCATCTTCAT	CCAGTTGGGC	420				
CTCTACTCTC	CCCGAATTGA	CCCTGATTAC	GTGGGACGAG	TCCGGCTGCA	GAAGGGGGCC	480				
TCTCTCCAGA	TGAGGGGTCT	CCGGGTGGAA	GACCAGGGCT	GGTACGAGTG	CCCGGTGTTT	540				
TTCTTGGACC	AGCACATCCC	TGAAGAGGAT	TTTGCTAAGG	GCTCTGGGT	GCATCTGACA	600				
GTCAATTAC	CCCTCAATT	CCAGGAGACA	CCTCTCTGTC	TGTGGAAAGT	GCAGGACTG	660				
GAGCTCTGTA	CCCTGGGCTG	TGTGGGCTTG	GGCAGCCCCC	TGCCTCATGT	GACGTGGAG	720				
CTCCAGAGAA	AGGACCTTGG	CCAGGGCCAG	GGCCAGGTGC	AAGTGCAGAA	CGGGACGCTG	780				
CGGATCCGCC	GGGTAGAGCG	AGGCAGCTCT	GGGCTCTACA	CCTGCCAGCC	CTCCAGCACT	840				
GAGGGCAGCG	CCACCCACGC	CAACCCAGCTG	CTAGTGTCTAG	GACCTCCAGT	CATCGTGGTG	900				
CCCCCCAGTA	ACAGCAGAGT	CAATGCTCTC	CAGGATGTTT	CATTGGCCTG	CCATGCTGAG	960				
GCAATCCCTG	CTAAGCTCAC	CTACAGCTGG	TCCAGGACA	ACATCAATGT	CTTCCACATT	1020				
AGCCGCTCTG	AGCCGCGGGT	GCAGATCTCT	GTGGACGGGA	GCTTGGGCT	GCTGGCCACT	1080				
CAGCTGATG	ATGCCGCTG	CTACACCTGT	GTGCCAGCA	ATGGCCCTCT	GCATCCAGCC	1140				
TCAGCCTCTG	CCTACCTCAC	TGTGCTCTGC	ATGCCGGGGG	TGATCCGCTG	CCCGGTTCGT	1200				
GCCAAACCCC	CATGCTCTCT	TGTCACTGG	ACCAAGGATG	GAAAGGCCCT	GCAGCTGGAC	1260				
AAGTTCCTTG	GCTGCTCCCA	GGGCAAGAGA	GGCTCACTGA	TCTATGCCCT	GGGGAAGGAG	1320				
GATGCCCTGG	GAGAACTACT	CTGCAACCCC	TACAACAGTC	TTGGTACCGC	CGGGCCCTCT	1380				
CCTGTGACCC	CGGTGCTGCT	CAAGGCTCCC	CCAGCTTTTA	TAGAGCCGGC	CAAGGAAGAA	1440				
TATTTCCAA	AAGTAGGGCG	GGAGCTGCTC	ATCCCTCTGT	CCGCCCAAGG	GGACCTCCTT	1500				
CCTGTGTGCT	CTTGGACCAA	GGTGGGCGGG	GGGCTGCAAG	CCAGGCCCA	GGTGGACAGC	1560				
AACAGCAGCC	TCACTCTGCG	ACCATGAGCC	AAGGAGGCC	ACGGGCACTG	GGAAATGAGT	1620				
GCCAGCAATG	CTGTGGCCCG	AGTGGCCACC	TCCAGCAAGC	TCTACGTGCT	GGGCACTAGC	1680				
CCTCATGTG	TCAACAAATG	GTCCGTGCTG	GCTTTCGCCA	AGGCTGCCAA	TGTCTCCTGG	1740				
GAGCCTGGCT	TTGATGCTGG	TTATCTGCG	AGATTCACTG	TCTGGTACAC	CCCACTGGCC	1800				
AAGLGTCTTG	ACCGAATGCA	CCATGACTGG	GTGCTCTTGG	CAGTGCCTGT	GGGGCTGCT	1860				
CACCTCCTAG	TGCCAGGGCT	GCAGCCCTAC	ACCCAGTACC	AGTTCAAGCT	GCTAGCTCAG	1920				
AACAAGCTGG	GGAGTGGTCC	CTTCAGCGAA	ATCGTCTTGT	CTGCTCCGGA	AGGGCTCTCT	1980				
ACCAAGCCAG	CTGCACCCGG	GCCTCCCCCA	ACAGAGATAC	CGCTCCCTCT	GTCCCTCCG	2040				
CGGGCTCTGG	TGGCAGTGAG	GACACCCCGG	GGGGTACTCC	TGCATTGGGA	TCCCCAGAG	2100				
CTGTGCCCTA	AGAGACTTGA	TGGCTACGTC	TTGGAAGGCC	GGCAAGGCTC	CCAGGCTCTG	2160				
GAGGTGCTGG	ACCCGGCTGT	GGCAGGCACA	GAAACAGAGC	TGCTGTGGCC	AGGCTCTATC	2220				
AAGGATGTTT	TCTAGAGATT	CCGCTCTGTG	GCCTTCGGGG	GCAGCTTGGT	CAGCGACCCC	2280				
AGCAACACGG	CCACGCTCTC	CACCTCCGGT	CTGGAGGTTT	ACCTTTCGCG	CAGCTAGCTG	2340				
CCGGCCTCTC	TGCCTCAGCC	CGTGCCTGGC	GGCGTGGTGG	CGCGAGTCTG	CTTCTGGGA	2400				
GTGGCGGTCC	TGTGAGCAT	CCTGGCCGGC	TGCTCTCTGA	ACCGGCGCAG	GGCTGCCCGC	2460				
CGCGCCCGCA	AGCGCTCTCG	CCAGATCCCA	CCTCTTATCT	TCTCTCCGAG	CGGGAAGTCA	2520				
GCTGACCCCT	CTGCTCTGGG	CTCAGGCACT	CCTGACAGCG	TGGCBAAGCT	GAAGCTCCAG	2580				
GGATCCCGCT	GCGCCAGGCT	GCGCTCTGGG	GGGATCCTGC	CGGAACTCCC		2640				
AGCCCCCAAC	CGGATCTCTC	ATCTAGCCGG	GGACCCCTAC	CTCTGGAGCC	CAITTTGCCG	2700				
GGCCAGAGCG	GGCGCTTTGT	GATGGGGCCC	ACTGTGGCGG	CCCCCAGGGA	AAGGTGAGGC	2760				
CGGAGAGCAG	CAGAACCTCG	GACTCCAGCG	CAGCGTCTGG	CCCGGTCTTT	TGACTGTAGC	2820				
AGCAGCAGCC	CCAGTGGGGC	ACCCAGGCCC	CTCTGCATTG	AAGACATCAG	CCCTGTGGCA	2880				
CCGCTCTCAG	CAGCCCCAGC	CAGTCCCTTG	CCAGGCTCTG	GACCCCTGCT	CCAGTACCTG	2940				
AGCCTGCCCT	TCTTCCGAGA	GATGAATGTC	GATGGGGACT	GGCCCGGCT	TGAGGAGGCC	3000				
AGCCTGCTG	CACCCCCAGC	TTACATGGAT	ACCCGGCGCT	GTCCACCTCT	ATCTTTCTCT	3060				
CGTCTCTCAG	AAACCCCTCC	TGTATCCCTC	AGGGAATCAC	TTCTGTGGGC	TGTGGTAGGG	3120				
GCTGGGGCCA	CTGCAGAGCC	CCCTTACACA	GCCTGCGCTG	ACTGGACACT	GAGGGAGCGG	3180				
CTGCTGCCAG	GCCTTCTCCC	TGCTGCCCTT	CGAGGCGAGC	TCACAGCCCA	GAGCAGCGGG	3240				

5 CGAGGCAGCG CTTCGTTCCT GCGGCCCCCC TCCACAGGCC CCTCTGCAGG AGGCAGCTAC 3300
 CTCAGCCCTG CTCAGGAGGA CACCAGCAGC TGGGCCAGTG GCCCTGAGAG ATGGCCCCGA 3360
 AGGGAGCATG TGGTGACAGT CAGCAAGAGG AGGAACACAT CTGTGGACGA GAACATATGAG 3420
 TGGGACTCAG AATTCCCTGG GGACATGGAA TTGCTGGAGA CTTTGCACCT GGGCTTGGCC 3480
 AGCTCCCGGC TCAGACCTGA AGCTGAGACA GAGCTAGGTH TGAAGACTCC AGAGGAGGGC 3540
 TGCCCTCCTGA ACACATGCCCA TGTTACTGGC CCTGAGGCCG GCTGTGCTGC CCTTGGGGAG 3600
 GAATTCCTGG CCTTCCGCCG CCGCCGAGAT GCTACTAGGG CTCGGCTACC AGCCTATCGA 3660
 CAGCCAGTCC CCCACCCCGA ACAGGCCACT CTGCTGTGAA CATCCCTAAT GTGAGGCTGT 3720
 10 GAAAAGGCAT ATGGACCTGC AAAGGAGGCC CCCAACCGA CAGACTTAGT TTCAAACGAG 3780
 GGCACCTGCC CTGCTGCCCC CTTTGGTGCC CAGGCACAGA CCCTGATAGT GGGTTTGGGT 3840
 CACCTTGGTA TGGAAATGAT GTGCTGACCC CTAGGTTGAG TCTGGGGATT GGAACAGGGA 3900
 TCTTAGGTCT GCCTCTCTCT CTCTCTCTCT CTCTCTCTGT CTCTCTCTGT GTGTGTGTGT 3960
 GTGTGTGAAG TTTTITACAG GTGAATAAAC AAAGTTTGAA AGAAAAAA AAATAAAAAA 4020
 15 AAAA 4024

Seq ID NO: C94 DNA Sequence
 Nucleic Acid Accession #: NM_006875
 Coding sequence: 186..1190

20 1 11 21 31 41 51
 GAATTCGCCA CGAGCGCGCG GCGAATCTCA ACGCTGCGCC GTCTGCGGGC GCTTCCGGGC 60
 CACCAGTTTC TCTGCTTTCC ACCCTGGGCG CCCCAGGCC TGGCTCCCCA GCTGCGCTGC 120
 CCGGGGGGTC CAGGCCCTGC GGGCTTAGCG GGTTCAGTGG GCTCAATCTG CGCAGCGCCA 180
 25 CCTCCATGTT GACCAAGCCT CTACAGGGGC CTCCCGGCC CCCCAGGACC CCCACGCGC 240
 CGCCAGGAGG CAGGAGTCGG GAAGCGTTGG AGGCCGAGTA TCGACTCGGC CCCCCTCTGG 300
 GTAAAGGGGG GTTGTGACCC GTCTTGGCAG GACACGSCCT CACAGATCGA CTCAGAGTGG 360
 CCATCAAAAT GATTCGCCCG AATCGTGTGC TGGGCTGGTC CCCCCTGTCA GACTCAGTCA 420
 CATGCCCACT CGAAGTCGCA CTGCTATGGA AAGTGGGTGC AGGTGGTGGG CACCTGCGCG 480
 30 TGAATCCGCT GCTTGACTGG TTTGAGACAC AGGAAGGCTT CATGCTGGTC CTCGAGCGGC 540
 CTTTGGCCGC CAGGATCTTC TTTGACTATA TCACAGAGAA GGGCCCACTG GGTGAAGGCC 600
 CAAGCCGCTG CTTCPTTGGC CAAGTAGTGG CAGCCATCCA GCACTGCCAT TCCGFTGGAG 660
 TTGTCCATCG TGACATCAAG GATGAGAACA TCCTGATAGA CCTACGCGGT GGCCTGCCCA 720
 35 AACTCATTGA TTTTGGTTCT GGTGCCCTGC TTCATGATGA ACCCTACACT GACTTTGATG 780
 GSACAAGGGT GTACAGCCCC CCAGAGTGA TCTCTCGACA CCAGTACCAT GCACCTCCGG 840
 CCACCTGTCT GTCACTGGGC ATCTCTCTCT ATGACATGGT GTGTGGGGAC ATTCCCTTTG 900
 AGAGGGACCA GGAATTTCTG GAAGCTGAGC TCCACTTCCC AGCCCATGTC TCCCCAGACT 960
 GCTGTGCCCT AATCGCGCGG TGCCCTGGCC CCAAACTTTC TTCCCGACCC TCACCTGGAAG 1020
 40 AGATCTGCTG CGACCCCTGG ATGCAAAAC CAGCCGAGGA TGTTACCCTC CACCCCTTCC 1080
 AAAGGAGGCC CTGCCCTTTT GGCCTGGTCC TTGCTACCTT AAGCCTGGCC TGGCTTGGCC 1140
 TGGCCCCCAA TGGTCAGAAG AGCCATCCCA TGGCCATGTC ACAGGGATAG ATGGACATTT 1200
 GTTGACTTGG CTTCPTTGGC CATTACCACT CATTAAAGTC CAGTATTAAT AAGGTAAAGG 1260
 ATTGAGGATC AGGGGTAGGA AGACATAAAC CAACTTTGCC CAGTTCCTTT CCCATCTCTA 1320
 45 CAAAGGAGCC TTCTTCCCTG AACCTGTGGT CCTGATTTT GGAGGGGGAA CTTCTTGCTT 1380
 CTCATTTTGC TAAGGAAGTT TATTTTGGTG AAGTTGTGCC CATTTTGAGC CCGGGGACTC 1440
 TTAATTTGAT GATGTGTGAC CCCACATTGG CACCTCTTAC TACCACCACA CAACTTAGT 1500
 TCATATGCTT TTACTTTGGG AAGGGTGCCT TCCCTTCCAAT ACCCCAGTAG CTTTATTTT 1560
 AGTAAAGGGA CTTTTCCTCC TAGCCTAGGG TCCCATATTG GGTCAAGCTG CTTACCTGCC 1620
 50 TCAGCCCAAG CCTTTTATTT TTGGGGGAGG TAATGCCCTG TTGTACCCCG AAGGCTTCTT 1680
 TTTTITTTTT TTTTITTTTT GGTGAGGGGA CCGTACTTTG TTATCCCAAG TGCTCTTATT 1740
 CTGGTGAGAA GAACCTTAAT TCCATAATTT GGGAGGAAAT GGAAGATGGA CACCACCGGA 1800
 CACCACGAGA CAATAGGATG GATGGATGG TTTTITGGGG GTATGGGCTAG GGGAAATAAG 1860
 GCTTGTGTTT TTTTITCCTG GGGCGCTCCC TCCAAATTTG CAGATTTTTC CAACTCTCTC 1920
 55 CTGAGCCGGG ATTTGCTCAAT TACTAAATG TAAATAATCA CGTATTGTGG GGAGGGGAGT 1980
 TCCAGGTGTG CCTCTCTTTT TTTTCTGCCC TGGATTATTT AAAAAGCCAT GTGTGGAAC 2040
 CCACATTTTA ATAAAGTGA TAGAATCAGA AAAAAA AAAA 2088

Seq ID NO: C95 DNA Sequence
 Nucleic Acid Accession #: NM_002510.1
 Coding sequence: 92..1774

60 1 11 21 31 41 51
 CAGATGCCAG AAGAACTAG TTGCTCTTGG TGGACGGGCC CAGAGGAATT CAGAGTTAAA 60
 CCTTGAATGC CTGCGTCCGT GAGAATTCAG CATGGAATGT CTCTACTATT TCCTGGGATT 120
 TCTGCTCCIG GCTGCAAGAT TGCCACTTGA TGCCGCCCAA CGATTTCATG ATGTGCTGGG 180
 CAATGAAGA CACTTCTGCT ACATGAGGGA GCACATCAAA TTAATGGCT GGTCTTCTGA 240
 TGAATATGAC TGAATGAAGA AACTCTACCC AGTGTGGAAG CCGGGAGACA TGAGGTGGA 300
 70 AAACTCTTGG AAGGGAGGCC GTGTGCAGGC GGTCTTGACC AGTGACTCAC CAGCCTCTGT 360
 GGGCTCAAT ATACATTTG CGGTGAACCT GATATTCCCT AGATGCCAAA AGGAAGATGC 420
 CAATGCCAAC ATAGTCTATG AGAAGAACTG CAGAAATGAG GCTGGTTTAT CTGCTGATCC 480
 ATATGTTTAC AACTGGACAG CATGGTCAGA GGACAGTGAC GGGGAAATG GCACCGGCCA 540
 AAGCCATCAT AACGTCTTCC CTGATGGGAA ACCTTTTCTT CACCACCCCG GATGGAGAG 600
 75 ATGGAATTC ATCTACGTCT TCCACACACT TGGTCAGTAT TTCCAGAAAT TGGGACGATG 660
 TTCAGTGAGA GTTCTCTGTA ACACAGCCAA TGTGACACTT GGCCTTCAAC TCATGGAAGT 720
 GACTGTCTAC AGAAGACATG GACGGGCATA TGTTCCTATC GCACAAGTGA AAGATGTGTA 780
 CGTGTAAACA GATCAGATT CTGTGTTTGT GACTATGTTT CAGAAGAACG ATCGAAATTC 840
 ATCCGACGAA ACCTTCTCTA AAGATCTCCC CATTATGTTT GATGTCTCTG TTCATGATCC 900
 TAGCCACTTC CTCAATTATT CTACATTAA CTACAAGTGG AGCTTGGGGG ATAATACTGG 960
 80 CCTGTTTGTG TCCACCAATC ATACTGTGAA TCACAAGTAT GTGCTCAATG GAACCTCTAG 1020
 CCTTAACCTC ACTGTGAAG CTGCAGCACC AGGACCTTGT CCGCCACCCG CACCACCC 1080
 CAGACCTTCA AAACCCACCC CTTCCTTAGG AACTGCTGGT GACAACCCCG TGGAGCTGAG 1140
 TAGGATTCCT GATGAAAACT GCCAGATTAA CAGATATGGC CACTTTCAG CCACCATCAC 1200
 AATTGTAGAG GGAATCTTAG AGGTTAACAT CATCCAGATG ACAGACGTCC TGATGCCGGT 1260

5	GCCATGGCCCT	GAAAGCTCCC	TAATAGACTT	TGTCGTGACC	TGCCAAGGGA	GCATTCCCAC	1320
	GGAGGTCCTGT	ACCATCAITTT	CTGACCCCCAC	CTGCGAGATC	ACCCAGAACA	CAGTCTGCAG	1380
	CCCTGTGGAT	GTGGATGAGA	TGTGTCTGCT	GACTGTGAGA	CGAACCTTCA	ATGGGTCTGG	1440
	GAGTACCTGT	GTGAACCTCA	CCCTGGGGGA	TGACACAAGC	CTGGCTCTCA	CGACACCCCT	1500
	GATTTCTGTT	CTGACAGAG	ACCCAGCCCT	GCCTTTAAGG	ATGGCAAACA	GTGCCCTGAT	1560
	CTCCGTGGC	TGCTTGGCCA	TATTTGTCCAC	TGTGATCTCC	CTCTTGGTGT	ACAAAAAACA	1620
	CAAGGAATAC	AACCCAAATAG	AAAAATAGTCC	TGGGAATGTG	GTGAGAAGCA	AAGGCCCTGAG	1680
	TGCTTTCTC	AACCGTGCAA	AAGCCGTGTT	CTTCCCGGGA	AACCAGGAAA	AGGATCCGCT	1740
10	ACTCAAAAC	CAAGAATTTA	AAGGAGTTTC	TTAAATTTCC	ACCTTGTTC	TGAAGCTCAC	1800
	TTTTCACTGC	CATTGATGTG	AGATGTGCTG	GAGTGGCTAT	TAACTTTTTT	TTCCTAAAGA	1860
	TTATTGTATA	ATAGATATGT	TGGTTTGGGG	AAGTTGAATT	TTTTATAGGT	TAAATGTCTAT	1920
	TTTAGAGATG	GGGAGAGGGA	TTATACTGCA	GGCAGCTTCA	GCCATGTTGT	GAACTGATA	1980
	AAAGCAACTT	AGCAAGGCTT	CTTTTCATTA	TTTTTTATGT	TTCACTTATA	AAGCTCTAGG	2040
15	TAACATAGTAG	GATAGAAACA	CTGTGTCCTG	AGAGTAAGGA	GAGAAGCTAC	TATTGATTAG	2100
	AGCCTAACCC	AGGTTAACTG	CAAGAAGAGG	CGGGATACCT	TCAGCTTTCC	ATGTAACCTGT	2160
	ATGCATAAAG	CCAATGTAGT	CCAGTTTCTA	AGATCATGTT	CCAAGCTAAC	TGAATCCAC	2220
	TTCAATAAC	ACICATGAAC	TCCTGATGGA	ACAATAACAG	GCCCAAGCCT	GTGGTATGAT	2280
	GTGCAACTT	GCTAGACTCA	GAAAAAATAC	TACTCTCATA	AATGGGTGGG	AGTATTTTGG	2340
20	TGACAACCTA	CTTTGCTTGG	CTGAGTGAAG	GAATGATATT	CATATATTCA	TTTATTCAT	2400
	GGACATTTAG	TTAGTGCITTT	TTATATACCA	GGCATGATGC	TGAGTGACAC	TCTTGTGTAT	2460
	ATTTCCAAAT	TTTTGTATAG	TCGCTGCACA	TATTTGAAAT	CATATATTAA	GACTTTCCAA	2520
	AGATGAGGT	CTTGTTTCTT	CATGGCAACT	TGATCAGTAA	GGATTTCCAC	TCTGTTTGT	2580
	ACTAAACCA	TCTACTATAT	GTTAGACATG	ACATTCITTT	TCTCTCCTTC	CTGAAAAATA	2640
25	AAGTGTGGGA	AGAGACAAA	AAAAAAA				2669

Seq ID NO: C96 DNA Sequence

Nucleic Acid Accession #: Eos sequence

Coding sequence: 1..4247

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	TGGGCTAATG	GATACTACAG	ACAACAGAGA	AAACTTGTG	AAGAGATTGG	CTGGTCTCTAT	120
35	ACAGGAGCAC	TGAATCAAAA	AAATTGGGGA	AAGAAATATC	CAACATGTAA	TAGCCCAAAA	180
	CAATCTCCTA	TCAATATTGA	TGAAGATCTT	ACACAAGTAA	ATGTGAATCT	TAAGAAACTT	240
	AAATTTTCAGG	GTTCGGATAA	AACATCATTT	GAAAAACACAT	TCATTTCATA	CACCTGGGAAA	300
	ACAGTGGAAA	TAAATCTCAC	TAATGACTAC	CTGTTCAGCG	GAGGAGTTTC	AGAAATGGTG	360
	TTTAAAGCAA	GCAAGATAAC	TTTTCACTGG	GGAAATGTCA	ATATGTCTATC	TGATGGATCA	420
40	GAGCATAGT	TAGAAGGACA	AAAATTTCCA	CTTGAGATGC	AAATCTACTG	CTTTGATGCA	480
	GACCGATTTT	CAAGTTTIGA	GGAGCAGTGC	AAAGGAAAAG	GGAGGTTAAG	AGCTTTATCC	540
	ATTTTGTITG	AGGTTGGGAC	AGAAGAAAAT	TTGGATTTC	AGCGGATTAT	TGATGGAGTC	600
	GAAAGTGTTA	TGCTTTTGG	GAAGCAGGCT	GCCTTAGATC	CATTTCATAT	GTTGAACCTT	660
	CTGCCAAACT	CACTGACAAA	GTATTACATT	TACAATGGCT	CATTGACATC	TCCTCCCTGC	720
45	ACAGACACAG	TTGACTGGAT	TGTTTTTAAA	GATACAGTTA	GCATCTCTGA	AAGCCAGTTG	780
	GCTGTTTTTT	GTGAAGTTCT	TACAATGCAA	CAATCTGGTT	ATGTCATGCT	GATGGACTAC	840
	TTACAAAACA	ATTTTCGAGA	GCAACAGTAC	AAGTCTCTTA	GACAGGTGTT	TTCTCTCAT	900
	ATCGGAAGG	AGAAGATTCA	TGAAGCAGTT	TGTAGTTTCA	AACCGAAGAA	TGTTCAAGCT	960
	GACCCAGAGA	ATTTATCCAG	CCCTCTGTGT	ACATGGGAAA	GACCTCGAGT	CGTTTATGAT	1020
50	ACCATGATTG	AGAAGTTTGC	AGTTTTGTAC	CAGCAGTTGG	ATGGAGAGGA	CCAAACCAAG	1080
	CATGAATTTT	TGACAGATGG	CTATCAAGAC	TTGGGTGCTA	TTCTCAATAA	TTTGCTACCC	1140
	AATATGAGTT	AGTTTCTTCA	GATAGTAGCC	ATATGCTACTA	ATGGCTTATA	TGGAAAATAC	1200
	AGCGACCAAC	TGATTTCTGA	CATGCCCTACT	GATAATCTCTG	AACCTTGATCT	TTTCCCTGAA	1260
	TTAATTTGGA	CTGAAGAAAT	AATCAAGGAG	GAGGAGAGGG	GAAAAGACAT	TGAAGAAGGC	1320
55	GCTATTGTGA	ATCCTGTGTAG	AGACAGTGTCT	ACAAACCAAA	TCAGGAAAAA	GGAAACCCAG	1380
	ATTTCTACCA	CAACACACTA	CAATCGCATA	GGGACGAAAT	ACAATGAAGC	CAAGACTAAC	1440
	CGATCCCCAA	CAAGAGGAAG	TGAATTTCTCT	GGAAAGGGTG	ATGTTCCCAA	TACTTCTTTA	1500
	AAATCCACTT	CCCAACCCAGT	CACATAAATA	GCCACAGAAA	AAGATATTTT	CTTGACTTCT	1560
	CAGACTGTGA	CTGACTGTCC	ACCTCACACT	GTGGAAGGTA	CTTCAGCCCTC	TTTAAATGAT	1620
60	GGCTCTAAAG	CTGTTCTTAG	ATCTCCACAT	ATGAACCTGT	CGGGGACTGC	AGATTCCTTA	1680
	AATACAGTTT	CTATACACGA	ATATGAGGAG	GAGAGTTTAT	TGACCAATTT	CAAGCTTGAT	1740
	ACTGGAGCTG	AAGATTCTTC	AGGCTCCAGT	CCCGCAACTT	CTGCTATCCC	ATTCTATCTT	1800
	GAGAACATAT	CCCAAGGGTA	TATATTFTCC	TCCGAAAACC	CAGAGACAAT	AACATATGAT	1860
	GTCCTTATAC	CAGAACTCTG	TAGAAATGCT	TCCGAAGATT	CAACTTCATC	AGGTTTCAGAA	1920
65	GAATCACTAA	AGGATCTCTC	TATGGAGGGA	AATGTGTGGT	TTCTTAGCTC	TACAGACATA	1980
	ACAGCACAGC	CCGATGTTGG	ATCAGGCAGA	GAGAGCTTTC	TCCAGACTAA	TTACTCTGAG	2040
	ATACGTGTTG	ATGAATCTGA	GAAGACAACC	AAGTCCCTTT	CTGCAGGCC	AGTGTATGTA	2100
	CAGGCTCCCT	CAGTTTACAGA	TCTGGAAATG	CCACATTAAT	CTACCTTTGC	CTACTTCCCA	2160
	ACTGAGGTAA	CACCTCATGC	TTTACCCCA	TCCTCCAGAC	AACAGGATTT	GGTCTCCACG	2220
70	GTCAGCGTGG	TATACTGCGA	GACAACCCAA	CCGGTATACA	ATGAGGCCAG	TAATAGTAGC	2280
	CATGAGTCTC	GTATTGGTCT	AGCTGAGGGG	TTGGAATCCG	AGAAGAGAGC	AGTTATACCC	2340
	CTTGATGATG	TGTCAGCCCT	GACTTTTATC	TGTCATGTTG	TTCTTGTGGG	TATTTCTATC	2400
	TACTGGAGGA	AATGCTTCCA	GACTGCACAC	TTTTACTTAG	AGGACAGTAC	ATCCCTAGAA	2460
	GTTATATCCA	CACCTCCAAC	ACCTATCTTT	CCAATTTTCA	ATGATGTCCG	AGCAATTCCA	2520
75	ATAAAGCACT	TTCCAAGACA	TGTTGCAGAT	TTACATGCAA	GTAGTGGGTT	TACTGAAGAA	2580
	TTTGAGGAAG	TGCAGAGCTG	TACTGTGTAC	TTAGTTATTA	CAGCAGACAG	CTCCAACCC	2640
	CCAGACAACA	AGCACAAGAA	TCGATACATA	AATATGTTTG	CCTATGATCA	TAGCAGGGTT	2700
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	GTTGATGCTC	ACACAGAGCC	AAAAGCTTAT	ATTGCTGCC	AAGGCCCACT	GAAATCCACA	2820
80	GCTGAAGATT	TCAGGAGAA	GATATGGGAA	CATAATGTGG	AAGTTATTGT	CATGATAACA	2880
	AACCTCTGTG	AGAAAGGAAG	GAGAAANTGT	GATCAGTACT	GGCTTGCCGA	TGGGAGTGAG	2940
	GAGTACCGGA	ACTTCTCTGT	CACCTCAGAA	AGTGTGCAAG	TGCTTGCCCTA	TTATACTGTG	3000
	AGGAATTTTA	CTCTAAGAAA	CACAAAAATA	AAAAGGGCT	CCCAAGAAAG	AAGACCCAGT	3060
	GGAGTGTGG	TCACACAGTA	TCACTACACG	CAGTGGCCCTG	ACATGGGAGT	ACCAAGATAC	3120
	TCCCTGCCAG	TGCTGACCTT	TGTGAGAAAG	GCAGCCTATG	CCAAGCCCA	TGCAGTGGGG	3180

	CCTGTTGTG	TCCACTGCAG	TGCTGGAGTT	GGAAGAACAG	GCACATATAT	TGTGCTAGAC	3240
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	ATCCGTTTAC	AAAGCAATTA	TTTGGTACAA	ACTGAGGAGC	AATATGTCCT	CATTCAATG	3360
5	ACACITGGTTG	AGGCCATACT	TAGTAAAGAA	ACTGAGGTGC	TGGAAGTCA	TATTCAATGCC	3420
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	TCATCCCTGA	GTGGAGAGG	CACAGACTAC	ATCAATGCCT	CCTATATCAT	GGGCTATTAC	3660
	CAGAGCAATG	AATTCAATCAT	TACCCAGCAC	CCTCTCCCTC	ATACCATCAA	GGATTTCTGG	3720
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	GCAGAGATG	AATTTGTTTA	CTGGCCAAAT	AAAGATGAGC	CTATAAATTG	TGAGAGCTTT	3840
	AAGGTCACTC	TTATGGCTGA	AGAACACAAA	TGTCTATCTA	ATGAGGAAAA	ACTTATAATT	3900
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	TGTCCTAAAT	GGCCAAATCC	AGATAGCCCC	ATTAGTAAAA	CTTTTGAAC	TATAAGTGTT	4020
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	TCCGTGGATG	TTTACCAGGT	AGCCAGATG	ATCAATCTGA	TGAGGCCAGG	AGTCTTTGCT	4200
	GACATTGAGC	AGTATCAGTT	TCTCTACAAA	GTGATCCTCA	GCCTTGTGAG	CACAAAGGCAG	4260
	BAAGAGAATC	CATOCACCTC	TCTGGACAGT	AATGGTGCCG	CATTGCGCTG	TGGAARATATA	4320
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Seq ID NO: C97 DNA Sequence
Nucleic Acid Accession #: XM_031379
Coding sequence: 148..7095

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	CAGCTCCTCT	GTGTTTGCCG	CCTGGATTGG	GCTAATGGAT	ACTACAGACA	ACAGAGAAAA	240
	CTGTGTAAG	AGATTGGCTG	GTCCCTATACA	GGAGCACTGA	ATCAAAAAAA	TTGGGGAAAG	300
	AAATATCCAA	CATGTAATAG	CCCAAAAAAA	TCCTCTATCA	ATATTGATGA	AGATCTTACA	360
	CAAGTAAATG	TCAATCTTAA	GAAACTTAAA	TTTCAGGGTT	GGGATAAAAC	ATCATTGSAA	420
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	AAATGCAATG	TGTCACTCTG	TGGATCAGAG	CATAGTTTAG	AAGGACAAAA	ATTTCACCTT	600
	GAGATGCAAA	TCTACTGCTT	TGATGCGGAC	CGATTTTCAA	GTTTTGAGGA	AGCAGTCAAA	660
	GGAAAAAGGA	AGTTAAGAGC	TTTATCCATT	TTGTTTGAGG	TGGGACAGA	AGAAAAATTG	720
40	GATTTCAAAG	CGATTATTGA	TGGAGTCGAA	AGTGTAGTCT	GTTTTGGGAA	GCAGGCTGCT	780
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	AATGGCTCAT	TGACACTTCC	TCCCCTGCACA	GACACAGTTG	ACTGGATTGT	TTTTAAAGAT	900
	ACAGTTAGCA	TCTCTGAAGG	CCAGTTGGCT	GTTTTGTGTG	AGTCTCTTAC	AAAGCAACAA	960
45	TCGTGTTATG	TGATGCTCAT	GGACTACTTA	CAAAACAATT	TTGAGAGACA	ACAGTACAG	1020
	TTCTCTAGAC	AGGTGTTTTT	CTCATACACT	GGAAAGGAAG	AGATTCAATG	AGCAGTTTGT	1080
	AGTTCAAGAC	CAGAAAAATG	TCAGGCTGAC	CCAGAGAAAT	ATACCAGCCT	TCCTGTATCA	1140
	TGGGAAGAC	CTCAGTCTGT	TTATGATACC	ATGATTGAGA	AGTTTGCAGT	TTTGTACCAG	1200
	CAGTTGGATG	GAGAGGACCA	AAACCAAGCAT	GAATTTTGA	CAGATGGCTA	TCAAGACTTG	1260
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	GAAGAGGAAA	AGACATCTGA	AGAAGGCGCT	ATTGTGAATC	CTGGTAGAGA	CAGTGCTACA	1500
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55	ACGAAATATG	ATGAAGCCAA	GACTAACCGA	TCCCCAACAA	GAGGAAGTGA	ATTCTCTGGA	1620
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	ACAGAAAAAG	ATATTTCCTT	GACTTCTCAG	ACTGTGACTG	AACTGCCACC	TCACACTGTG	1740
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60	GCAACTTCTG	CTATCCCAAT	CATCTCTGAG	AACATATCCC	AAGGATATAT	ATTTTCTCTC	1980
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	GAAGATTCAA	CTTCATCAGG	TTCAGAGGAA	TCACTAAAGG	ATCCCTTCTAT	GGAGGGAAT	2100
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65	TCCTTTTCTG	CAGGCCCACT	GATGTACAGG	GGTCCCTCAG	TTACAGATCT	GGAAATGCCA	2280
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	GTATACATG	GTGAGACACC	TCTTCAACCT	TCCTACAGTA	GTGAGTCTT	TCCTCTAGTC	2460
70	AOCCTTTGT	TGCTTGACAA	TCAGATCCTC	AACACTACCC	CTGCTGCTTC	AAGTAGTGAT	2520
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	TCTCAAGCAT	CTGGTGACAC	TTGGCTTAAA	CCTGTGCTTA	GTGCAAACTC	AGAGCCAGCA	3600
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	AGTGAARAAC	TGCTGCACTC	TACATCTGTA	CCAGTTTTTG	ATGTGTGCCC	TACTTCTCAT	3900
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Nucleic Acid Accession #: NM_002851
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	AATAATCTGT	TACTTATTGT	AAATACTGCC	CTAGTGTCTC	CATGGACCAA	ATTTATATTT	5160
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	ATACCTTCAT	TTTGAAGGAA	GTTTTATAGA	GAATAACACC	TTACCAACAA	TTGTTCAAAT	5400
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	GAAAGTGTTA	GTGTTTITGG	GAAGCAGGCT	GCITTAGATC	CATTCTACT	GTGAACTCTT	660
	CTGCCAAGCT	CAACTGACAA	GTATTACATT	TACAATGGCT	CATTGACATC	TCCTCCCTGC	720
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	ACTGGAAGG	AAGAGATTCA	TGAAGCAGTT	TGTAGTTTCA	AACAGAAAAA	TGTTCAAGGT	960
	GACCCAGAGA	ATATACCCAG	CCTTCTTGT	ACATGGGAAA	GACCTCGAGT	CGTTTATGAT	1020
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	CATGAATTT	TGACAGATGG	CTATCAAGAC	TTGGGTGCTA	TTCTCAATTA	TTTGCTACCC	1140
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	BAGTCTCGTA	TGGTCTTAGC	TGAGGGGTTG	GAATCCBAGA	AGAAAGGCAGT	TATACCCCTT	1320
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70	FATGATCATA	CAGGGGTATA	GCTAGCACAG	CTTGTGAAA	AGGATGGCAA	ACTGACTGAT	1740
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	ATGGGAGTAC	CAGAGTACTC	CCTGCCAGTG	CTGACCTTTG	TGAGAAAGGC	AGCCTATGCC	2160
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	ACATATATTT	CTGTAGACAG	TATGTTGCAG	CAGATTCAAC	ACGAAGGAAC	TGTCAACATA	2280
80	TTTGCTTCT	TAAACACAT	COGTTTCAAA	AGAAATTAAT	TGTTACAAAC	TGAGGAGCAA	2340
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	GACAGCTATA	TTCATGCTCA	TGTTAATGCA	CTCCTATTTC	CTGAGCCAGC	AGGCAAAACA	2460
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10	CAACTAGAAA	AAGAAAATTC	CGTGGATGTT	TACCAGGTAG	CCAAGATGAT	CAATCTGATG	3180
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5	AGCCTCTCAG	TGTAGATGAA	GAGGGGCTGG	TCTTACTGGA	GCAGAAGCTT	TCCGAGCCCA	3480
	AGACCCAGAT	CAACAGCCAA	CTGCGSCCCA	TGATGTGAGA	GCTGGAAGAG	AGGGCAGCTC	3540
	AGCAGAGGGG	CCACCTCCAT	TTGCTGGAGA	CAAGCATAGA	TGGGATTCTG	GCTGATGTGA	3600
	AGAAGCTTGA	GAACATTAGG	GACAACTTGC	CCCCAGGCTG	CTACAATACC	CAGGCTCTTG	3660
	AGCAACAGTG	AAGCTGCCAT	AAATATTTCT	CAACTGAGGT	TCTTGGGATA	CAGATCTCAG	3720
	GGCTCGGGAG	CCATGTCATG	TGAGTGGGTG	GGATGGGGAC	ATTTGAACAT	GTTAATGGG	3780
	TATGCTCAGG	TCAACTGACC	TGACCCCAT	CCTGATCCCA	TGGCCAGGTG	GTGTCTTAT	3840
	TGCACCATAC	TCCTTGCTTC	CTGATGCTGG	GCAATGAGGC	AGATAGCACT	GGGTGTGAGA	3900
10	ATGATCAAGG	ATCTGGACCC	CAAAGAATAG	ACTGGATGGA	AAGACAAACT	GCACAGGCCG	3960
	ATGTTTGCTT	CATAATAGTC	GTAAGTGGAG	TCCTGGAATT	TGGACAAGTG	CTGTTGGGAT	4020
	ATAGTCAACT	TATTCCTTGA	GTAATGTGAC	TAAAGGAAAA	AACCTTGTCT	TTGCCCAGGC	4080
	ATGAAATCTT	TCCTAATGTC	AGAACAGAGT	GCAACCCAGT	CACACTGTGG	CCAGTAAAAAT	4140
	ACTATTGCTT	CATATTGTCC	TCCTGCAAGCT	TCTTGCTGAT	CAGAGTTCCT	CCTACTTTACA	4200
15	ACCCAGGGTG	TGAACATGTT	CTCCATTTTC	AAGCTGGAAG	AAGTGAGCAG	TGTGGGAGTG	4260
	AGGACTGTGA	AGGCAGGCC	ATTCAGAGCT	ATGGTGCCTG	CTGGTGCCTG	CCACCTTCAA	4320
	GTTCGGGACC	TGGGCATGAC	ATCCTTCTCT	TTAATGATGC	CATGGCAACT	TAGAGATTGC	4380
	ATTTTATTTA	AAGCATTTCC	TACCGACAAA	GCAAAATGTT	GGAAAATATT	TACTTTTTTG	4440
	GTTCCAAAGT	GATAGAAAAG	TGTGGCTTGG	GCATTGAAAG	AGGTAAATTT	CTCTAGATTI	4500
20	ATTAGTCCTA	ATCTGATCCT	ACTTTTCGAA	CACCAAAAAT	GATCGCATC	AATGTATTTT	4560
	ATCTTATTTT	CTCAATCTCC	TCTCTCTTTC	CTCCACCCAT	AATAAGAGAA	TGTTCTTACT	4620
	CACACTTCAG	CTGGGTCACT	TCCATCCCTC	CATTCTCTCT	TCCATCCATC	TTTCCATCCA	4680
	TTACCTCCAT	CCATCTCTCC	AACATATATT	TATTGAGTAC	CTACTGTGTG	CCAGGGGCTG	4740
	TGGGGACAGT	GGTGACATAG	TCTCTGCCCT	CATAGAGTTG	ATTGTCTAGT	GAGGAAGACA	4800
25	AGCATTTTFA	AAAAATAAAT	TAAACCTTAC	AAACTTTGTT	TGTCAACAAG	GGTGTATTAT	4860
	GCAATAACCB	CTTGGTTTGC	AACTCTTTTG	CTCAACAGAA	CATATGTTGC	AAGACCCCTCC	4920
	CATGGGGGAG	CTTAGATTCT	GGCAAGGCTG	ACAGAGCTCT	GGGTTGTGCA	CATTTCTTTG	4980
	CATTCCAGCT	GTCACTCTGT	GCCTTTCTAC	AACTGATTGC	AACAGACTGT	TGAGTTATGA	5040
	TAAACCCAGT	GGGAATTGCT	GGAGGAACCA	GAGGCACATC	CACCTTGGCT	GGGAGAGCTA	5100
30	TGGTGTCTCC	TGCTTCTGT	ATTTCTCTGG	ATTTTCTTGA	AAGTGTTTT	AAATAAAGAA	5160
	CAATTGTTAG	ATGCC					5175

Seq ID NO: C107 DNA Sequence
Nucleic Acid Accession #: NM_021101
Coding sequence: 221..856

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	GCAGGGGCTC	CCGCTTAAAC	TTCTCCCGCG	GGGCGCAGCC	ACCTTGGGGA	GTCCGGGTTG	180
	CCCACTCTCA	AACCTCTCGC	CTCTGCAACC	TGCCAACCCCT	GAGCCACGCG	GGGCGCCCGA	240
	GGGAGTCAAT	GCCAAACGCG	GGCTGCAAGT	GTGGGCTTTC	ATTCTCGGCT	TCCTGGGATG	300
	GATCGGGGCC	ATCGTCAGCA	CTGCCCTGCC	CCAGTGGAGG	ATTACTCTCT	ATGCGCGGGA	360
45	CAACATGTG	ACCGGCCAGG	CCATGTACGA	GGGGCTGTGG	ATGTCCTGCG	TGTGCGCAGG	420
	CAOCCGGGAG	ATCCAGTGCA	AAGTCTTTGA	CTCCTTGCCT	AATCTGAGCA	GCACATTGCA	480
	AGCAACCCGT	GCCTTGATGG	TGGTTGGCAT	CCTCCTGGGA	GTGATAGCAA	TCCTTGTGGC	540
	CACCGTTGGC	ATGAAGTGTA	TGAAGTGCCT	GGAAGACGAT	GAGGTGCAGA	AGATGAGGAT	600
	GGCTGTCTAT	GGGGCGCGGA	TATTTCTTCT	TGCAGGTCTG	GCTATTTTAG	TTGCCACAGC	660
50	ATGGTATGGC	AATAGAAATG	TTCAAGAAAT	CTATGACCTT	ATGACCCGAG	TCAATGCCAG	720
	GTACGGAATT	GGTCAGGCTC	TCTTCACTGG	CTGGGCTGCT	GCTTCTCTCT	GCCTTCTGGG	780
	AGGTGCCCTA	CTTGTCTGTT	CTGTCCCGG	AAAAACAACC	TCCTTACCCA	CACCAAGGCC	840
	CTATCCAAAA	CCTGACCTTT	CCAGCGGGAA	AGACTACGTG	TGACACAGAG	GCAAAAGGAG	900
	AAATCATGCT	TGAACAACAA	CGAAATGGA	CATTGAGATA	CTATCATTA	CATTAGGACC	960
55	TAGAAATTTT	GGGTATTGTA	ATCTAAGATA	TGTTATTACA	AAACAACAAA	ACAAACAAAA	1020
	AACCCATGTG	TAAATAACT	CAGTGTCTAA	CATGGCTTAA	TCTTATTTTA	TCTTCTTTCC	1080
	TCAATATAGG	AGGCAAGATT	TTTCCATTG	TATTACTGCT	TCCCATGAG	TACTCATACT	1140
	CAATGGGGGG	AAGGGTGTCT	CCTTAAATAT	ATATAGATAT	GTATATATAC	ATGTTTTTCT	1200
	ATTAATAATA	GCCAGTAAAA	AAAAAATAAA	AAAAAAA			1237

Seq ID NO: C108 DNA Sequence
Nucleic Acid Accession #: AF508964.1
Coding sequence: 98..1531

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	TGGACCCGCC	ATGGCGCGGC	TCTGGGGCTT	CTGCTGGCTG	GTGTGGGGCT	TCTGGAGGGC	180
70	CGCTTTGCCC	TGTCGCCAGT	CCTGCAATG	CAGTGCCTCT	CGGATCTGGT	GCAGGAGCCC	240
	TTCTCTGGCC	ATCGTGGCAT	TTCCAGAGAT	GGAGCCTAAC	AGTGTAGATC	CTGAGAACAT	300
	CACCGAAATT	TTCAATCGCA	ACCAGAAAAG	GTAGAAATC	ATCAACGAAG	ATGATGTTGA	360
	AGCTTATGTG	GGACTGAGAA	ATCTGACAT	TGTGGATTCT	GGATTAAAT	TTGTGGCTCA	420
	TAAAGCATTT	CTGAAAAACA	GCAACCTGCA	GCACATCAAT	TTTACCCGAA	ACAAACTGAC	480
75	GAGTTTGTCT	AGGAACATTT	TCCGTACCTT	TGACTGTGCT	GAACTGATCC	TGGTGGGCAA	540
	TCCATTACCA	TGCTCTCTGT	ACATTATGTG	GATCAAGACT	CTCCAGAGGG	CTAAATCCAG	600
	TCCAGACACT	CAGGATTTGT	ACTGCGCTGAA	TGAAAGCAGC	AAGAATATT	CCCTGGCAAA	660
	CCGTGACATA	CCCATTTGTG	GTTTGCCATC	TGCAATCTG	GCCGCACTTA	ACCTCACTGT	720
	GGAGGAAGGA	AAGTCTATCA	CAITATCTCT	TAGTGTGGCA	GGTGATCCGG	TTCTTAATAT	780
80	GTATTGGGAT	GTGGTAAACC	TGGTTTCCAA	ACATATGAAT	GAAACAGGCC	ACACACAGGG	840
	CTCCTTAAGG	ATACTAACA	TTTCATCCGA	TGACAGTGGG	AAGCAGATCT	CTTGTGTGGC	900
	GGAAAACTTT	ATAGAGGAAG	ATCAAGATTC	TGTCAACCTC	ACTGTGCAAT	TTGCACCAAC	960
	TATTCACATT	CTCGAATCTC	CAACCTCAGA	CCACCACTGG	TGCATTCCAT	TCACTGTGAA	1020
	AGGCAACCCC	AAACCAAGGC	TTCAAGGTTT	CTATAACGGG	GCAATATTGA	ATGAGTCCAA	1080
	ATACATCTGT	ACTAAATATC	ATGTTACCAA	TCACAGGGAG	TACCAAGGCT	GCTTCCAGCT	1140

	GGATAATCCC	ACTCACATGA	ACAAATGGGGA	CTACACTCTA	ATAGCCAAAG	ATGAGTATGG	1200
	GAAGGATGAG	AAACAGATTT	CTGCTCACCT	CATGGGCTGG	CCTGGAATTG	ACGATGCTGC	1260
	AAACCCAAAT	TATCCTTGATG	TAATTTATGA	AGATTATGGA	ACTGCAGCGA	ATGACATCGG	1320
5	GGACACCAAG	AACAGAGTA	ATGAAATCCC	TCCACAGAC	GTCACTGATA	AAACCGGTGG	1380
	GGAAACATCT	TGGTCTCTATG	CTGTGGTGGT	GATTGCGTCT	GTGGTGGGAT	TTTGCCCTTT	1440
	GGTAATGCTG	TTCTTGCTTA	AGTTGGCAAG	ACACTCCAAG	TTTGGCATGA	AAGGTTTTGT	1500
	TTTGTTCAT	AAGATCCOCAC	TGGATGGGTA	GCTGAAATTA	AGGAAAAGAC	AGAGAAAGGG	1560
	GCTGTGGTGC	TTGTTGGTTG	ATGCTGCCAT	GTAAGCTGGA	CTCCTGGGAC	TGCTGTTGGC	1620
10	TTATCCCGGG	AAGTGGCTGT	TATCTGGGGT	TTTCTGGTAG	ATGTGGGCGG	TGTTTTGGAGG	1680
	CTGTACTATA	TGAGGCTGTC	ATATACTGTG	AGCTGTGATT	GGGGAACACC	AATGCAGAGG	1740
	TAACCTCAG	CGAGCTAAGC	AGCACCTCAA	GAAACATGT	TAAATTAATG	CTTCTCTCT	1800
	TACAGTAGTT	CAAAATACAA	ACTGAAATGA	AATCCCATTG	GATTGTACTT	CTCTCTGAA	1860
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	CCATCAGTTT	GGGACTTGGT	AGTATTATTA	AAAGGTTATT	TCCTTCACIG	TCAATAAAAG	2160
	TCCAAATGTT	TAGCTTAGGT	CTGAGAGTCA	AACAATGTTA	AGGATTGTCT	TAAAGTTCTT	2220
20	TAGCCAGCAA	AACAATAACA	AACAATAACA	AACGTTTAAA	AAGAAGAAGA	2280	
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25	CTGGGAGCAA	GAATGGCTGG	CCTGGCTGGA	GCAGGAGAGG	AGATTCTAAG	AAGGATAGTC	2580
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35	AAGGCATTAA	TCTTAATAAA	CCAGGATCCA	TTTAGGTACC	ACTTGATATA	AAAAGGATAT	3180
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Nucleic Acid Accession #: NM_006180.1
Coding sequence: 352..2820

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ACTGACTACT ACAGGGTGGG TGGCCACACA ATGCTGCCCA TTCCGCTGGT GCCTCCAGAT 2520
AGCATCATG ACAGGAAATT CACGACGGAA AGCGACGTCT GGAGCCTGGG GGTCTGTGTT 2580
TGGGAGATTT TCACCTATGG CAAACAGCCC TGGTACCAGC TGTCAACAA TGAAGTGATA 2640
GAGGTATCA CTCAGGGCCG AGTCTCTCAG CAGCCCGGCA CGTCCGCCCA GGAGGTGAT 2700
GAGCTGATGC TTGGGTGCTG GCAGCGAGAG CCCCACATGA GGAAGAACAT CAGGGCATC 2760
CATACCTCTC TTCAGAACTT GGCCAAAGCA TCTCCGCTCT ACCGTGACAT TCTAGGCTAG 2820
GGCCCTTTTC CCCAGACCGA TCCCTCCCAA CGTACTCCTC AGACGGGCTG AGAGGATGAA 2880
CATCTTTTAA CTGCGCTGCG AGGCCACCAA GCTGCTCTCC TTCATCTGTA CAGTATTAA 2940
ATCAAAGACT CCGAGAAGCT CTCGAGGGAA CCACTGTGTA CTCTTCTATC CATAGACATA 3000
GTATTGACTT CTTTTTGGCA TTATCTCTTT CTCTCTTCTC ATCTCCCTTG GTTGTCTCTT 3060
TTTCTTTTCT TAAATTTCT TTTTCTCTCT TTTTCTCTCT TTTCTCTCTT CACGATCTCT 3120
ACCCCTTTCT TTGAATCAAT CTGGCTCTCG CATTACTATT AACTCTGCT AGACAAAGGC 3180
CTTAACAAC GTATTTGTT ATATCAGCAG ACATCTCAGT TTGCCACCA CAACTAACAA 3240
TGCTTGTG TATCTCTGCC TTTGATGTGG ATGAATAAAA GGGAAACAA ATATTTCAT 3300
TAAACTTTGT CACTCTGCT GTACAGATAT CGAGAGTTTC TATGATTTCA CTCTATTATA 3360
TTTATTATTA TTACTGTCT TATGTTTTTT GGATGGCTTA AGCCTGTGTA TAAAAAGAA 3420
AACTGTGTGT CAATCTGTGA AGCCTTATC TATGGGAGAT TAAACCAGA GAGAAAGAG 3480
ATTTATTATG AACCGCAATA TGGAGGAAC AAAGACAACC ACTGGGATCA GCTGGTGICA 3540
GTCCCTACTT AGGAATACT CAGCACTGT TAGCTGGGAA GAATGTATTC GGCACCTTCC 3600
CCTGAGGACC TTTCTGAGGA GTAAAAAGAC TACTGGCTC TGTGCCATGG ATGATTCTTT 3660
TCCATCACC AGAATGATA GCGTCAGTA GAGAGCAAG ATGGCTT 3700

Seq ID NO: C110 DNA Sequence
Nucleic Acid Accession #: Eos sequence
Coding sequence: 939..2372

1 11 21 31 41 51

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5	CCGAGGCTC	TGCCCGCGCC	TGGCTTCTTC	GTAGCTGGAT	GCATATCGTG	CTCCGGGCAG	180
	CGCGGGCGCA	GGGCACCGCT	TGCGGCACAC	CCTAGCACAC	ATGAACACGC	GCAAGAGCTG	240
	AACCAAGCAC	GGTTTCCATT	TCAAAAGGGE	AGACAGCCTC	TACCGCGATT	GTAGAGAGA	300
	CTGTGGTGTG	AATTAGGGAC	CGGAGGCGT	CGAACGGAGG	AACGGTTTAT	CTTAGAGACT	360
	AATTTTCTGG	AGTTTCTGCC	CCTGCTCTGC	GTACGCCCTC	ACGTCACTTC	GCCAGCAGTA	420
10	GCAGAGGCGG	CGGCGGCGGC	TCCCGAAAT	GGTTTGGAGC	AGGAGCCTCG	CTGGCTGCTT	480
	CGCTCGCGCT	CTACGCGCTC	AGTCCC CGGC	GGTAGCAGGA	GCTTGGACCC	AGGCGCCGCC	540
	GGCGGGCGTG	AGGCGCGGGA	GGCCGCGCTC	GAGGTGCATA	CCGACCCGCC	ATTGCGCATCT	600
	AACRAAGGAT	CTGCGCCCCA	GAGAGTCCCG	GGAGCGCCGC	CGGTGCGTGC	CCGCGCCGCC	660
	GGGCCATGCA	GCGACGCGCG	CCGCGGAGCT	CCGAGCAGCG	GTAGCGCCCC	CCTGTAAAGC	720
15	GGTTCTGCTAT	GCGGGGCCA	CTGTGAACCC	TGCCGCTTGC	CGGAACACTC	TTGCTCCCG	780
	ACCAGCTCAG	CCTCTGATAA	GCTGAGACTCG	GCACGCCCGC	AACAAACACC	GAGGAGTTAA	840
	GAGAGCCCGA	AGCGCAGGGA	AGGCCCTCCCC	GCACGGGTGG	GGGAAAGCGG	CCGCTGCACG	900
	GCGGGGACAG	GCACTCGGGC	TGGCACTGGC	TGCTAGGGAT	GTGCTCTCTG	ATAAGGTGGC	960
	ATGGACCCGC	CATGCGCGCG	CTCTGGGGCT	TCTGCTGGCT	GGTTGTGGGC	TTCTGGAGGG	1020
20	CCGCTTTGGC	TGTTGGTAAC	TCTGTCAAAI	GCACTGCCCT	TGGATCTTGG	TGCAGCGACC	1080
	CTTCTCTCTG	CATGCTGGCA	TTTCCGAGAT	TGGAGCCTAA	CAGTGTAGAT	CCTGAGAACA	1140
	TCACCGAAAT	TTTCATCGCA	AACCAAGAAA	GGTTAGAAAT	CATCAACGAA	GATGATGTTG	1200
	AAGCTTATGT	GGAATCGAGA	AATCTGACAA	TTGTGGATT	TGGATTAAAA	TTTGTGGCTC	1260
	ATAAAGCAAT	TCTGAAAAAC	AGCAACCTGC	AGCACATCAA	TTTTACCCGA	AACAAACTGA	1320
25	CGAGTTTGGC	TAGGAAACAT	TTCCGTCAAC	TTGACTGTTC	TGAACCTGAT	CTGGTGGGCA	1380
	ATCCATTTAC	ATGCTCTCTG	GACATTATGT	GGATCAAGAC	TCTCCAGAG	GCTAAATCCA	1440
	GTCCAGACAC	TCAGGATTTG	TACTGCTCTG	ATGAAAGCAG	CAAGAATATT	CCCTGGCAA	1500
	ACCTGCGAGT	ACCAATTTGT	GGTTTGCCAT	CTGCAAACTC	GGCCGACCTT	AACCTCACTG	1560
	TGGAGGAAGG	AAAGTCTATC	ACATTAATCT	GTAGTGTGGC	AGGTGATCCG	GTCTCTAATA	1620
30	TGATTTGGC	TGTTGGTAAC	CTGTTTCCA	AACATATGAA	TGAACCAAGC	CACACACAGG	1680
	GCTCCTTAAG	GATAACTAAC	ATTTCATCCG	ATGACAGTGG	GAAGCAGATC	TCTTGTGTGG	1740
	CGGAAATCT	TGTAGGAGAA	GATCAAGATT	CTGTCAACCT	CACGTGTGAT	TTTGCACCAA	1800
	CTATCACATT	TCTCGAATCT	CCAACTCAG	ACCACCACTG	GTGCAATCCA	TTCACTGTGA	1860
	AAAGGCAACCC	CAAAACGAGG	CTTCAGTGGT	TCTATAACGG	GGCAATATTG	AATGAGTCCA	1920
35	AATACATCTG	TACTAAATAA	CATGTTACCA	ATCACACGGA	GTACCAACGC	TGCTCCAGC	1980
	TGGATTAATCC	CACCTCACATG	AACAATGGGG	ACTACACTCT	AATAGCCAG	AATGAGTATG	2040
	GGAGGATGA	GAAACAGATT	TCTGCTCAGT	TCATGGGCTG	GCCTGGARTT	GACGATGGTG	2100
	CAAAACCCAA	TATCTCTGAT	GTAAATTATG	AAGATTATGG	AACCTCAGCG	AATGACATCG	2160
	GGGACACCA	GAAACAGAGT	AATGAAATCC	CTTCCACAGA	CGTCACTGAT	AAAACCGGTC	2220
40	GGGAACATCT	CTCGTCTAT	GCTGTGGTGG	TGATTGCGTC	TGTGGTGGGA	TTTTCCTTTT	2280
	TGGTAATGCT	GTTCCTGCTT	AAGTTGGCAA	GACACTCCAA	GTTCGGCATG	AAAGGTTTTG	2340
	TTTTGTTTCA	TAAGATCCCA	CTGGATGGGT	AGCTGAAATA	AAGGAAAGA	CAGAGAAAGG	2400
	GGCTGTGGTG	CTTGTGTGTT	GATGCTGCCA	TGTAAGCTGG	ACTCCTGGGA	CTGCTGTGG	2460
	CTTATCCCGG	GAGGTGCTGC	TTATCTGGGG	TTTCTGGTA	GATGTGGGCG	GTGTTGGAG	2520
45	GCTGTACTTG	ATGAAGCCCTG	CATATACTGT	GAGCTGTGAT	TGGGGAACAC	CAATGCAGAG	2580
	GTAACTCTCA	GCGAGCTAAG	CAGCACCTCA	AGAAACATG	TTAAATTAAT	GCTTCTCTTC	2640
	TTACAGTAGT	TCMAATACAA	AACGAAATG	AAATCCCAAT	GGATGTACT	TCTCTTCTGA	2700
	AAAGTGTGCT	TTTTCACCT	ACTGGACATT	TATTGACTTA	ATTGCTTCTG	TTTATTAATA	2760
	TTGACCTGCA	AAGTTAAAAA	AAAATTAAG	TTGAGAACAG	GTATAAGTGC	ACACTGAATA	2820
50	GTCTAATCTA	CATGTAAACAC	ATATTTTAGT	GTGATTTTCT	ATACTCTAAT	CAGCACTGAA	2880
	TTCAGAGGGT	TTGACTTTTT	CATCTATAAC	ACAGTGACTA	AAAGAGTTAA	GGGTATATAT	2940
	ACCATCATT	TGGGACTTGG	TAGTATTATT	AAAGGTTTAT	TTCTTCACT	GTCAATAAAA	3000
	GTCCAAATGT	TCTAGCTTAG	TCTGAGAGTC	AAACAATGTT	AAGGATTGTC	TTAAAGTTCC	3060
	TTAGCCAGCA	AAACAAACAA	AAACAAACAA	AAACAATGAA	AAAGGTTTAA	AAAGAGGAAG	3120
55	AAGAAABAAA	ACAAGAACAA	GCAGCAACAG	CTGTTTGTGT	GGGGCTATAG	ATTTAAGTTA	3180
	GGCATAGTCA	ATTTCAGAAAT	AACTAAGAGT	GGATATATAG	CATATGGTGA	AATTATAACC	3240
	TTGCCCTTTT	TTATTTTGCC	TCTGCGATCC	ACCTGCTTTT	TAGAAGTCTG	CCGAGTGAGA	3300
	AGGCCACAGT	ATCTCATGCT	GTTTGCATTA	CAGAACTGCA	GCTTTTCTAC	TCTGAAAAGG	3360
	CCTGGGAGCA	GAAATGGCTGG	CCTGCTGTGA	GCAGGAGAGG	AGATTCTAAG	AAGGATAGTC	3420
60	CCCCCTACAA	CATAGCTGTCA	TACTGCTGGG	TTTTCATGGG	TAGGAAAGCT	TGCTCTGACC	3480
	CCAGCAGCAA	AGAGGTGGCA	GCTCCTTAAT	GAATATATGC	TTTATAATGT	CCTTCTTCAT	3540
	TGCTGAGAGG	GCAGCCTTAG	AGCTGTGGAT	TTCTGCTATC	CCCTGAGTC	TGACCCATGG	3600
	ACACCTGTTT	CATTCACTTT	AGCATCACAG	TGACCTTTGT	ATGCTCTGTT	CAGTCTGTGT	3660
	CAGGCAGTAT	GCTTGTCTCT	AAGAGAGGTT	TGGCTATCCC	CACCCACCCC	CACCCACCCC	3720
65	TGTTCTCTTT	TTATCAGGAG	GACTTCAGAG	CCAGGCCCTG	AGCATTTTGT	TTGAAAACAC	3780
	AATCAGCTCT	GACAGTTAGA	CATGCACACA	GACGCCATAG	CTGGATTGGA	AACATTGATG	3840
	TTTTAAAAAT	TTATTTTTTT	TGGAATATAGT	TGCACAAATG	CTGCATTTTA	GCTTTAAGGT	3900
	TCATAGATT	TTTAACTAGT	CCAACACAGT	CAGAAACATT	GTTTTGAATC	CTCTGTAAAC	3960
	CAAGGCATTA	ATCTTAATTA	ACCAGGATCC	ATTAGGTATC	CACCTGATAT	AAAAAGGATA	4020
70	TCATAATGA	ATATTTTATA	CTGCATCCTT	TACATTAGCC	ACTAAATACG	TTATTGCTTG	4080
	ATGAAGACCT	TTACAGAAAT	CCTATGGATT	GCAGCAITTC	ACTTGGCTAC	TTCTATCCCA	4140
	TGCTTTAAG	AGGGGCAGTT	TCTCBAAGGC	AGAAACATGC	CGCCAGTTCT	CAGTTTTCCT	4200
	TCTTAACCTC	ATTGATATGT	AAGGGCAGCT	GGCCCCCAAT	GTGGGGAGGT	CCGAAACATT	4260
	TCTGAATTCC	CATTTTCTTG	TTCGCGGCTA	AATGACAGTT	TCTGTCAITA	CTTAGATTEC	4320
75	GATCTTCTCC	AAAGGTGTG	ATTTACAAAG	AGGCCAGCTA	ATAGCAGAAA	TCATGACCTT	4380
	GAAAGAGAGA	TGAATTTCTA	GCTGTGAGCC	AGGCAGGAGC	TCAGTATGGC	AAAGGTTCTT	4440
	GAGANTCAGC	CATTTGGTAC	AAAAAGGATT	TTTAAAGCTT	TTATGTTATA	CCATGGAGCC	4500
	ATAGAAAGGC	TATGGATTTG	TTAAGAACTA	TTTAAAGTGT	TTCCAGACCC	AAAAAGGAAA	4560
	AATAAAAAAA	AAAGGAATAT	TGTATCCCAAC	AGCTAGAAGG	ATTGCAAGGT	AGATTTTTGT	4620
80	TTTTAAATGG	AGAGAAATGG	ACAGATAAGG	CCATTTAATA	TATCAAGAT	CAGTTGACAT	4680
	CTCTAGGGA	ATGATGAAAA	CAGCAGGCTA	T			4711

Seq ID NO: C111 DNA Sequence
Nucleic Acid Accession #: NM_130830.1
Coding sequence: 1..1746

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	GGGGCAGCA	TTGTGGCGGT	GCCACCCCT	CTGCCCTGGA	ACGCCATGAG	CCTGCAGATC	180
	CTCAACACGC	ACATCACTGA	ACTCAATGAG	TCCCCCTTCC	TCAATATCTC	AGCCCTCATC	240
	GCCTTGAGGA	TTGAGAGAA	TGAGCTGTGG	CGCATCACGC	CTGGGGCTT	CCGAAACCTG	300
10	GGCTGCTGC	GCTATCTCAG	CCTCCGCAAC	AACAAAGCTGC	AGGTTCTGCC	CATCGGCTC	360
	TTCCAGGGCC	TGGACAGCCT	TGAGTCTCTC	CTTCTGTCCA	GTAACCAAGT	GTTCAGATC	420
	CAGCGGCTC	ACCTCTCCCA	GTGCAGCAAC	CTCAAGGAGC	TGCAGTTGCA	CGGCAACCAC	480
	CTGGAATACA	TCCCTGACGG	AGCCCTTGAC	CACCTGGTAG	GACTCACGAA	GCTCAATCTG	540
	GGCAGAATA	GCCTCACCCA	CATCTCACCC	AGGGTCTTCC	AGCACCTGGG	CAATCTCCAG	600
	GTCTCCGGC	TGTATGAGAA	CAGGCTCAGC	GATATCCCA	TGGGCACTTT	TGATGGGCTT	660
15	GTTAACCTGC	AGGAACCTGG	TCTACAGCAG	AACCAGATTG	GACTGCTCTC	CCCTGGTCTC	720
	TTCCACAACA	ACACAAACCT	CCAGAGACTC	TACCTGTCCA	ACCAACCACAT	CTCCAGCTG	780
	CCACCCAGCA	TCCTCATGCA	GCTGCCCCAG	CTCAACCGTC	TTACTCTCTT	TGGGAATTCC	840
	CTGAGGAGC	TCCTCTCGGG	GATCTTCGGG	CCCATGCCCA	ACCTGGGGGA	GCTTTGGCTC	900
20	TATGACAACC	ACATCTCTTC	TCTACCGGAC	AATGTCTTCA	GCAACCTCCG	CCAGTTGCA	960
	GTCTCTGATC	TTAGCGCGAA	TCAGATCAGC	TTTATCTCCC	CGGGTGCCTT	CAACGGGCTA	1020
	ACGGAGCTTC	GGGAGCTGTC	CCTCCACACC	AACGCACTGC	AGGACCTTGA	CGGGAATGTC	1080
	TTCCGCAATG	TGGCCAACTC	GCAGAACATC	TCCCTGCAGA	ACATGCGCTT	CAGACAGCTC	1140
	CCAGGGAATA	TCCTCGCCAA	CGTCAATGGC	CTCATGCCCA	TCCAGCTGCA	GAACAACAG	1200
	CTGAGAGACT	TGCCCTCGGG	CATCTTCGAT	CACCTGGGGA	AACCTGTGTA	CTGCGGCTG	1260
25	TATGACAATC	CCCTGAGGGG	TGACTCAGAC	ATCTTCCCGC	TCCGCAACTG	GCTCTGCTC	1320
	AACAGGCTTA	GGTATGGGAC	GGACACTGTA	CCTGTGTGTT	TCAGCCGAGC	CAATGTCCGA	1380
	GGCCAGTCCC	TCATTATCAT	CAATGTCAAC	GTTCCTGTTT	CAAGCGTCCA	TGTCCCTGAG	1440
	GTGCTTAGTT	ACCCGAAAC	ACCATGGTAC	CCAGACACAC	CCAGTTACCT	TGACACCCA	1500
30	TCCTGTCTTT	CTTACACTGA	GCTAACCCAG	CCTGTGGAAG	ACTACACTGA	CTGACTACCC	1560
	ATTGAGGTCA	CTGATGACCG	CAGCGTTTGG	GGCATGACCC	AGGCCCGAGG	CGGGCTGGCC	1620
	ATTGCCCTCA	TGTGAATTGG	CATTGTGACC	CTGGCCTGCT	CCCTGGCTGC	CTGGGTGAGC	1680
	TGTTGCTGCT	GCAAGAGAG	GAGCCAAGCT	GCTCTGATGC	AGATGAAGGC	ACCCATGAG	1740
	TGTTAA						1746

Seq ID NO: C112 DNA Sequence
Nucleic Acid Accession #: NM_002658.1
Coding sequence: 77..1372

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	CCCCGACCTC	GCCACCATGA	GAGCCCTGCT	GGCGCGCCTG	CTTCTCTGGC	TCCTGGTGGT	120
	GAGCGACTCC	AAAGGCAGCA	ATGAACCTCA	TCAAGTTCCA	TGAACTGTG	ACTGTCTAAA	180
45	TGGAGGAACA	TGTGTGTCCA	ACAAGTACTT	CTCCAACATT	CACCTGGTGA	ACTGCCCAA	240
	GAAATTCGGA	GGGCAGCACT	GTGAAATAGA	TAAGTCAAAA	ACCTGCTATG	AGGGGAATGG	300
	TCACCTTTAC	CGAGGAAGAG	CCAGCACTGA	CACCATGGGC	CGGCCCTGCC	TGCCCTGAAA	360
	CTCTGCCACT	GTCCCTTCAGC	AAACGTACCA	TGCCACAGA	TCGATGCTC	TTGAGCTGGG	420
	CCTGGGGA	CATAATTA	GCAGGAACCC	AGAACACCGG	AGGGGACCTT	GGTGTCTATG	480
50	GCAGGTGGGC	CTAAGCGCGC	TGTCTCAAGA	GTGCATGGTG	CATGACTGCG	CAGATGGA	540
	AAAGCCCTCC	TTCTCTCCAG	AAGAATTAAA	ATTTCACTGT	GGCCAAAGA	CTCTGAGGCC	600
	CCGCTTTAAG	ATTTATGGGG	GAGAATTAC	CACCATGAG	AACCAAGCCT	GGTTTGCGGC	660
	CATCTACAGG	AGGCACCGGG	GGGGCTCTGT	CACCTACGTC	TGTGGAGGCA	GCTCTATCAG	720
	CCCTTGCTGG	GTGATCAGCG	CCACACACTG	CTTCATTGAT	TACCCAAAGA	AGGAGGACTA	780
55	CATCGTCTAC	CTGGGTGGCT	CAAGGCTTAA	CTCCAACAG	CRAGGGGAGA	TGAAGTTTGA	840
	GGTGGAAAC	CTCATCTTAC	ACAAGGACTA	CAGCGCTGAC	ACGCTTGCTC	ACCACAACGA	900
	CATGCGCTTG	CTGAAGATCC	GTTCCAAGGA	GGGCAGGTGT	GCGCAGCCAT	CCCGACTPAT	960
	ACAGAACCAT	TGCTTGCCTT	CGATGTATAA	CGATCCCCAG	TTTGGCCAAA	GCTGTGAGAT	1020
	CATGCGCTTT	CGAAAAGAGA	ATTCTACCGA	CTATCTCTAT	CCGGAGCAGC	TGAAAATGAC	1080
60	TGTTGTGAAG	CTGATTTCCT	ACCGGGAGTG	TCAGCAGCCC	CCTACTACG	GCTCTGAAGT	1140
	CACCACCAAA	ATGCTATGTG	CTGCTGACCC	CCAAATGGAA	ACAGATTCTT	GCCAGGGAGA	1200
	CTCAGGGGGA	CCCTCTGCTC	GTTCCCTCCA	AGGCGCGATG	ACTTTGACTG	GAATTGTGAG	1260
	CTGGGGCGCT	GGATGTGCCC	TGAAGGACAA	GCCAGGCGTC	TACACGAGAG	TCTCACACTT	1320
	CTTACCCCTGG	ATCCGCACTC	ACACCAAGGA	AGAGAAATGGC	CTGGCCCTCT	GAGGGTCCCC	1380
65	AGGGAGGAAA	CGGGCACCAC	CCGCTTCTTT	GCTGGTTGTC	ATTTTTCAG	TAGAGTCATC	1440
	TCCATCAGCT	GTAAAGAGAG	ACTGGGAAGA	TAGGCTCTGC	ACAGATGGAT	TTCCTGTGG	1500
	CACCACCAGG	GTAAACGACA	ATAGCTTTAC	CCTCAAGGAT	AGGCCCTGGT	GCTGGCTGCC	1560
	CAGACCTCTT	GGCCAGGATG	GAGGGTGGT	CCTGACTCAA	CATGTTACTG	ACCAGCAACT	1620
	TGCTCTTTTC	TGGACTGAAG	CCTGCAGGAG	TTAAAAAGGG	CAGGGCATCT	CCTGTGCTAG	1680
70	GGCTCBAAGG	GAGAGCCAGC	TCCCCCGACC	GGTGGGCAIT	TGTGAGGCC	ATGGTTGAGA	1740
	ARTGAATAAT	TTCCCAATTA	GGAAGTGTAA	GCAGCTGAGG	TCTCTGAGG	GAGCTTAGCC	1800
	AATGTGGGAG	CAGCGGTTTG	GGGAGCAGAG	ACACTAACGA	CTTCAGGGCA	GGGCTCTGAT	1860
	ATTCCATGAA	TGTATCAGGA	AATATATATG	TGTGTGTATG	TTTGCACTCT	TGTTGTGTGG	1920
	GCTGTGAGTG	TAAGTGTGAG	TAAGAGCTGG	TGTCGTATTT	TTAAGTCTAA	ATATTTCTTT	1980
75	AAACTGTGTG	GACTGTGATG	CCACACAGAG	TGGTCTTTCT	GGAGAGGTTA	TAGGTCATCT	2040
	CTGGGGCCTC	TGGGTTCCCT	CACGTGACAG	TGCTGGGAA	TGTACTTATT	CTGCAGCATG	2100
	ACCTGTGACC	AGCAGTGTCT	CAGTTTCACT	TTACATAGA	TGTCCTTTTC	TTGGCCAGTT	2160
	ATCCCTTCTT	TTAGCCTTAG	TTATCCCAAT	CCTCACTGGG	TGGGGTGAGG	ACCACCTCCT	2220
	ACACTGAATA	TTTATATTTC	ACTATTTTAA	TTTATATTTT	TGTAATTTTA	AATAAAGTGG	2280
80	ATCAATAAAA	TGTGATTTTT	CTGA				2304

Seq ID NO: C113 DNA Sequence
Nucleic Acid Accession #: XM_087254.1
Coding sequence: 47..2332

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AAACCCAGAC	TCTTCAGAAG	GAACCTTATC	TTATCTTAGT	AGTTTATCCO	ATCTTAACAA	180
CTTATCCCAT	CTTACAACCA	GTTCCTCTTT	CAGAACCAGT	CCTGAAAATG	AAACTGAACT	240
AATTAAGAA	CATGATCTCT	TCTTTAAAGC	AGTCAGTCTC	TGTCACACIG	TACAGATTAG	300
CAATGTTCAA	ACTGACTGCA	CTGGIGATGG	TCCCTGGCAA	TCCAACTTGG	CACCATCGCA	360
GTTCGAGTAC	TATGCATCTT	CACCAGATGA	AAAGGCTCTA	GTAGAAGCTG	CTGCAAGGAT	420
TGGTATTGTC	TTTATTGGCA	ATTCTGAAGA	AACTATGGAG	GTAAAACTC	TTGGAAAATC	480
GGAAAGGTAC	AAACTGCTTC	ATATTCTGGA	ATTGATTC	GATCGTAGGA	GAATGAGTGT	540
AATTTGTTAG	GCACCTTCAG	GTGAGAAGTT	ATTATTGCT	AAAGGAGCTG	AGTCATCAAT	600
TCTCCCTAAA	TGTATAGGTG	GAGAAATAGA	AAAAACCAGA	ATTCATGTAG	ATGAATTTGC	660
TTTGAAAGGG	CTAAGAACTC	TGTGTATAGC	ATATAGAAAA	TTTACATCAA	AAGAGTATGA	720
GGAAATAGAT	AAACGCATAT	TTGAAGCCAG	GACTGCCTTG	CAGCAGCCGG	AAGAGAAATT	780
GGCAGCTGTT	TTCCAGTTCA	TAGAGAAAGA	CCTGATATTA	CTTGGAGCCA	CAGCAGTAGA	840
AGACAGACTA	CAAGATAAAG	TTGAGAAAC	TATTGAAGCA	TTGAGAATGG	CTGGTATCAA	900
AGTATGGGTA	CTTACTGGGG	ATAAACATGA	AACAGCTGTT	AGTGTGAGTT	TATCATGTGG	960
CCATTTCAT	AGAACCATGA	ACATCCCTGA	ACTTATAAAC	CAGAAATCAG	ACACCGAGTG	1020
TGCTGAACAA	TTGAGGCAGC	TTGCCAGAA	AATTACAGAG	GATCATGTGA	TTGAGCATGG	1080
GCTGGTAGTG	GATGGGACCA	GCCTATCTCT	TGCACTCAGG	GAGCATGAAA	ACTATTTTAT	1140
GGAAAGTTGC	AGAAATTTGT	CAGCTGTATT	ATGCTGTGCT	ATGGCTCCAC	TGCAGAAAGC	1200
AAAGTAATA	AGACTATATA	AAATATCACC	TGAGAAACCT	ATAACATTGG	CTGTTGTTGA	1260
TGGTGTCAAT	GACCTAAGCA	TGATACAAGA	AGCCCATGTT	GGCATAGGAA	TCATGGGTAA	1320
AGAAGGAAGA	CAGGCTGCAG	GAACAGTGA	CTATGCAATA	GCCAGATTGA	AGTTCCCTCT	1380
CAAAATGCTT	TTTGTCTCAT	GTCAATTTTA	TTATATTAGA	ATAGCTACCC	TTGTACAGTA	1440
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GTTCCTCAG	CAAAACATGT	ATGACAGCGT	GTACCTGACT	TTATACAATA	TTTGTTTTAC	1560
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AAATAAGCCC	ACCCCTTTATC	GAGACATTAG	TAAAACCCGC	CTCTAAGTA	TTAAAACATT	1680
TCTTTATTGG	AGCCTCTTGG	GCCTCAGTCA	TGCCCTTATT	TTCTTTTGG	GATCCTATT	1740
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TGTTGTTTAT	CAGCTCCCTG	CAAGTGGTTC	TGCTTGGTTC	GCCATAATCC	TCATGGTTGT	2040
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TACTGAAAG	GCACAGCTTA	CTGAAACAAA	TGCAGGTATC	AAGTGCTTGG	ACTCCATGTC	2160
CTGTTTCCCG	GAAAGAGAA	CAGCGTGTGC	ATCTGTTGGA	AGATGCTGG	AACGAGTTAT	2220
AGGAAGATGT	AGTCCAAACC	ACATCAGCAG	ATCATGGAGT	GCATCCGATC	CTTTCTATAC	2280
CAACGACAGG	AGCATCTTGA	CTCTCTCCAC	AATGGACTCA	TCTACTTGTT	AAAGGGCCAG	2340
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Seq ID NO: C114 DNA Sequence

Nucleic Acid Accession #: XM_087461.1

Coding sequence: 236..1138

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Seq ID NO: C115 DNA Sequence

Nucleic Acid Accession #: XM_051522.4

Coding sequence: 127..1215

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Seq ID NO: C116 DNA Sequence
Nucleic Acid Accession #: NM_000350.1
Coding sequence: 82..6903

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	ATTGTCTTCC	CCCACTTCTG	CCCTGGGCGG	GGCTCATTC	ACCTTGCACT	GAGCCAGGCT	5640
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30	CTGATTTGGA	AGAACCTGTT	TGCCAAGGTG	GTGGAAGGGG	TGGTGACTTT	CTCCTGACCT	5760
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	ATTGTTGATG	AAGATGATGA	TGTGGCTGAA	GAAGACAAAA	GAATTATTAC	TGGTGGAAAT	5880
	AAACATGACA	TCTTAAGGCT	ACATGAACCT	ACCAAGATT	ATCTGGGCAC	CTCCAGCCCA	5940
	GCAGTGGACA	GGCTGTGTGT	CGGAGTTGCG	CCTGGAGAGT	GCTTTGGCCT	CCTGGGAGTG	6000
35	AATGGTGCCG	GCAAAACBAC	CACATTCAAG	ATGCTCACTG	GGGACACCAC	AGTGACCTCA	6060
	GGGGATGCCA	CCGTAGCAGG	CAGAGTATT	TTAACCAATA	TTTCTGAAGT	CCATCAAAAT	6120
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	TACCTTTATG	CCCGGCTTCC	AGGTGTACCA	GCAGAAAGAA	TGGAAGAGGT	TGCAAACTGG	6240
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40	GGCAACAAAG	GGAAACTCTC	CACAGCCATC	GCACTCATTC	GCTGCCACCC	GCTGGTGCTG	6360
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	GTGAGCATCA	TCGAAAGAGG	GAGGGCTGTG	GTCTTCACAT	CCACAGCAT	GGAAAGATGT	6480
	GAGGCATGCT	GTACCCGGCT	GGCCTATCAT	GTAAAGGGCG	CCTTTCGATG	TATGGGCCAC	6540
45	ATTGAGATTC	TCAAGTCCAA	ATTGGAGAT	GGCTATATCG	TCACAAATGA	GATCAAAATC	6600
	CCGAGGAGCG	ACCTGTCTCC	TGACCTGAAC	CCTGTGGAGC	AGTTCTTCCA	GGGGAACCTC	6660
	CCAGGCACTG	TGCAGAGGGA	GAGGCACTAC	AACATGCTCC	AGTTCAGAGT	CTCCTCCCTC	6720
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50	GAAAGTCAAT	ACCTCCCTCT	GCACTCTGAG	GCTGTCTGGG	CCAGTTCGAC	AGCCAGGAC	6900
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	ACCGAAACTG	ACTTGTCTAC	CTGGAACACC	TGATGGTGAA	ACCAAAACAA	TACAAATCC	7140
55	TTCTCCAGAG	CCAGAACTCA	GAAACCCCGG	GCCATCCAC	TAGCAGCTTT	GGCTCCCATC	7200
	TGCTCTCTAT	TTCAAGCAGA	TCTGCTTTTC	TGCATGTTTG	TCGTGTGTTC	TGCTTTGTGT	7260
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Seq ID NO: C117 DNA Sequence

Nucleic Acid Accession #: NM_006671.2

Coding sequence: 138..1820

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	AGCAGGCCAG	GCTCACCATG	GTGCGGCAATG	CCATCTTGCC	ACGGGGGAGG	GACCTGTGCA	180
	GGCGGAATGG	ACTCCTCATC	CTGTCTGTGC	TGCTGTGCAT	CGTGGGCTGC	CTCCTCGGCT	240
	TCTTCTTGAG	GACCCGGGCG	CTCTCACCA	AGGAATTAG	TACTTCCAG	TTCCCTGGAG	300
	AGCTCCTGAT	GAGGATGCTG	AAGATGATGA	TCTGCCACT	GGTGGTCTCC	AGCTTGATGT	360
70	CCGCACTTGC	CTCCTGGAT	GCCAGACCT	CTAGCCGCTT	GGGGCTGCTC	ACCGTGGCGT	420
	ACTACCTGTG	GACCACTTTC	ATGGCTGTCA	TGCTGGGCAT	CTTCATGCTC	TCCATCATCC	480
	ACCCAGGCGG	CGCGGCCAGG	AAGGAGACCA	CGGAGCAGAG	TGGGAAGCCC	ATCATGAGCT	540
	CAGCCGATGC	CCTGTGGAC	CTCATCCGGA	ACATGTTCCT	AGCCAACTTA	GTAGAAGCCA	600
	CATTCAAACA	GTACCGCAC	AAGACCAACC	CAGTTGTCAA	GTCCCCCAAG	GTGGCACCAG	660
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	TGCTGGGCGG	CATGGGTGAC	AGCGGGGCCC	CCCTGGTCA	CTCTGCGGAC	TGCTCTCAATG	900
	AGTCGGTCA	GAAGATCTGT	GCGGTGGCTG	TGTGGTATT	CCCTTCGGC	ATTGTGTTCC	960
80	TGATTGGGGG	TAAATCTCTG	GAGATGGAAG	ACCCAGGGG	CGTGGGCAAG	AAGCTGGGCT	1020
	TCTACTCAGT	CACCGTGGTG	TGCGGGCTGG	TGCTCCAGGG	GCTCTTTATC	CTGCCCTTTC	1080
	TCTACTTCTT	CATCACCAAG	AGAATCCCA	TGCTCTTCAT	CCGGCGCATC	CTGAGGCTC	1140
	TGCTCATCGC	GCTGGCCACC	TCTCCAGGCT	CAGCCACACT	GCCCATCACC	TTCAAGTGCC	1200
	TGCTGGAGGA	CAACCAATC	GACCGGCGCA	TGCTGCTT	CGTGTGCTCC	GTGGGTGCCA	1260
	CCATCAACAT	GGAGGCACT	GCGCTCTAAG	AGGCTGTGGC	CGGCATCTTC	ATGCCCCAGG	1320

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25 Seq ID NO: C118 DNA Sequence
 Nucleic Acid Accession #: NM_005689
 Coding sequence: 278..2806

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 35 GCAAGGCAC CCGGATGTC GCGCCCTCT CCGAGTGACA AGTCCCGGCC TCGGTCCCG 240
 CAGTCCCGCG AGCCTCGGCC GCGTCCACG CATTCGCATG GTGACTGTGG GCAACTACTG 300
 CGAGGCCGAA GGGCCCGTGG GTCCGCGCTG GATGACAGAT GGCCTGAGTC CCTGCTTCTT 360
 TCTCACGCTC GTGCCCTCGA CCGGATGGC TCTAGGACT CTGGCTTGG TGCTGGCTCT 420
 TCCCTGAGCA CCGCGGAGC GGCCTCGTGG TGCTGATTCG CTGTCTTGG GGGCCCGGCC 480
 40 TCGCATCTCT CCTACGTTG TGCACTGCTC TCTGGCCACA CTTAGGCGCG CGCTGCCCTT 540
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 TGCTCTCTG CTCTCTGGA CTGTGCGGTT TGCACTGAG AACTTGGCCC TGCTGTCTTG 780
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Seq ID NO: C119 DNA Sequence
 Nucleic Acid Accession #: NM_000676
 Coding sequence: 333..1331

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	CGGGCGGGCG	CGCGGGCCAA	TGGGTGCGGC	CTCTTGGCCG	CGGGGGGCCC	CGACCCGTGG	180
	GTCCCGGCCA	CCAGCGCCCC	AGCCCCGAGG	CTCAGAAGCG	GCAGGCGGAG	GCGCGGTCCG	240
	GGCGCTATGG	CCATGCCCCG	CGGGTCTCAC	GCBGCTGCC	CTCGCCCGCC	GCGCCTCCG	300
10	TAGGGGGCGC	CCGGGGCCCA	GCTGGCCCGG	CCATGCTGCT	GGAGACACAG	GACGCGCTGT	360
	ACGTGGCGCT	GGAGCTGGTC	ATCGCCGCGC	TTTGGGTGGC	GGGCAACGTG	CTGGTGTGCG	420
	CGCGGTGGG	CACGGCGAAC	ACTCTGCAGA	CGCCACCAAA	CTACTTCCCTG	GTGTCCCTGG	480
	CTGGGGCCGA	CGTGGCCGTC	GGGCTCTTCG	CCATGCCCTT	TGCCATCACC	ATCAGCCTGG	540
	GCTTCTGCAC	TGACTTCTAC	GGCTGCTCTT	TCTTGCCCTG	CTTCTGTCTG	GTGCTCACGC	600
15	AGAGCTCCAT	CTTCAGCCCT	CTGGCCGTGG	CAGTGCACAG	ATACCTGGCC	ATCTGTGTCC	660
	CGCTCAGGTA	TAAAGTTTTC	GTACCGGGGA	CCCGAGCAAG	AGGGGTCAAT	GCTGTCTCTT	720
	GGGTCCCTGC	CTTGGSCATC	GGATTGACTC	CATTCTGGG	GTGGAACAGT	AAAGACAGTG	780
	CCACCAACAA	CTGCACAGAA	CCCTGGGATG	GAACCAAGAA	TGAAAGCTGC	TGCCCTTGGA	840
	AGTGTCTCTT	TGAGAATGTG	GTCCCATAGA	GCTACATGGT	ATATTTCAT	TTCTTTGGGT	900
20	GTGTCTTGCC	CCACTGCTTT	ATAATGCTGG	TGATCTACAT	TAAGATCTTC	CTGGTGGCTT	960
	GCAGGCGAGT	TCAGCGCACT	GAGCTGATGG	ACCACTCGAG	GACCACTCTC	CAGCGGGAGA	1020
	TCCATGCAGC	CAAGTCACAG	GCCATGATTG	TGGGGATTTC	TGCCCTGTGC	TGGTTACCTG	1080
	TGCATGCTGT	TAACTGTGTC	ACTCTTTTTC	AGCCAGCTCA	GGGTAAAAAT	AAGCCCAAGT	1140
	GGGCAATGAA	TATGGCCATT	CTTCTGTCTC	ATGCCAATTC	AGTTGTCAAT	CCCAATTGCT	1200
25	ATGCTTACCG	GAACCGAGAC	TTCGCTACAA	CTTTTCACAA	AATTATCTCC	AGGTATCTCT	1260
	TCTGCCAAGC	AGATGTCAAG	AGTGGGAATG	GTGAGGCTCG	GGTACAGCCT	GCTCTCGGTG	1320
	TGGGCCCTATG	CTTAGGCTTC	TGSCCTCTTC	CAGGAGAGAA	TACAAATCCA	CAAGAAACAA	1380
	AGAGGACACG	GCTGTGTTTC	ATTGTGAAG	ATAGCTACAC	CTCACAGGGA	AATGGACTGC	1440
	CTCTCTTGAG	CACTTCCCTG	GAGCTACAC	GTATCTAGCT	AATATGTATG	TGTCAGTAGT	1500
30	AGGCTCCAAG	GATTGACAAA	TATATTTATG	ATCTATTACG	CTGCTTTTAC	TGTGTGGATT	1560
	ATGCCAACAG	CTTGAATGGA	TTCTAACAGA	CTCTTTTGTT	TTTAAAGTTC	TGCTCTGTTT	1620
	ATGTTGGAAA	ATTACTGAAA	CTATTTTACT	GTGAAACAGT	GTGAACTATT	ATAATGCAAA	1680
	TACTTTTAA	CTTAGAGGCA	ATGGAAAAAT	AAAAGTTGAC	TGTACTAAAA	ATG	1733

Seq ID NO: C120 DNA Sequence
Nucleic Acid Accession #: NM_052932
Coding sequence: 217..786

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	GAAGCGGAGC	CGGCGCCGCG	TGCGCAGAGG	AGCCGCTCTC	GCCTGGCCCA	CCTGGGCTGG	180
	GAGCCCAAGC	GGCTCCCGCA	TCTTGCCTTC	GGAACAATGG	GACTCGGCGC	GCGAGGTGCT	240
45	TGGGCGCGCG	TGCTCTCTGG	GAGCGTGCAG	GTGCTGCGCG	TGCTGGGGGC	CGCCCATGAA	300
	AGCGCAGCCA	TGGCGGAGAC	TCTCCAACTAT	GTGCTTCTG	ACCATACAAA	TGAAACCTCC	360
	AAAGTACTGT	TGAACCCACC	AACCTCAGTT	GCTCAGACT	CCAGTAATAC	AACGGTCACC	420
	ACCATGAAC	CTACAGCGGC	ATCTAATACA	ACAACCCAG	GGATGGTCTC	AACAAATATG	480
	ACTTCTACCA	CCTTAAAGTC	TACACCCAAA	ACAACAGTGG	TTTCACAGAA	CACATCTCAG	540
50	ATATCAACAT	CCACAAATGAC	CGTAACCCAC	AATAGTTCAG	TGACATCTGC	TGCCTCATCA	600
	GTAAACATCA	CAACAACTAT	GCAATCTGAA	GCAAGAAAG	GATCAAAATT	TGATCTGGG	660
	AGCTTTGTTG	TGGGTATTGT	ATTAAAGCTG	GGAGTTTAT	CTATTCTTTA	CATTGGATGC	720
	AAATGTATT	ACTCAAGAAG	AGGCAATGCG	TATCGAACCA	TAGATGAACA	TGATGOCATC	780
	ATTTAAGGAA	ATCCATGGAC	CAAGGATGGA	ATACAGATTG	ATGCTGCCCC	ATCAATTAAT	840
55	TTTGGTTTAT	TTATAGTTTA	AAACAATATT	CTCTTTTGA	AAATAGTATA	AACAGGCCAT	900
	GCATATTAAG	TACAGTGTAT	TACGTAAATA	TGTAAAGATT	CTTCAAGGTA	ACAAGGGTTT	960
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	ATAGTAAGAC	AAACAAGTCC	TATCTTTTTC	TTTTTGCTG	GGGTGGGGGC	ATTGGTCACA	1080
	TATGACCAAT	AATTGAAGA	CGTCATCACT	GAAAGACAGA	ATGCCATCTG	GGCATACAAA	1140
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	TCAGTGTCTT	TCAGAGCTGG	ATATATCTTA	ATTACTAATG	CCACACAGAA	ATTATACAA	1260
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65	ATTAACATCT	TTTGAAGCTT	CAATGTTGAT	GTAATTTTTC	TTCTCTGTGT	AATTAGGTTA	1500
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70	TAAGAAAAAG	AACCGCTTGT	ATGATTTTTC	AAAGAACATT	TAGAACTCTA	TAGAGTCAAA	1800
	ACTATAGCGT	AATGCTGTGT	TTATTAAGCC	AGGGATTGTC	GGACTTCCCC	CAGGCAACTA	1860
	AACCTGCAGG	ATGAAAATGC	TATATTTTCT	TTCAATGACT	GTGATATTA	CTCAGATTTC	1920
	GGGAAATGAC	ATTTTATATC	TAAACAAAC	ACCAAAATAT	TTTAGAAATA	ATTCTTAGAA	1980
	AGTTTGGAGA	GGAATTTTTC	GAGAGGACAT	TTCTCTCTTC	CTGATTGGGA	TATTCCTTCA	2040
75	AATCCCTCCT	CTTACTCCAT	GCTGAAGGAG	AAGTACTCTC	AGATGCATTA	TGTTAATGGA	2100
	GAGAAAAAGC	ACAGTATTGT	AGAGACACCA	ATATTAGCTA	ATGTATTTTC	GAGTGTTCCT	2160
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	TGTAGTCACA	GTAATATCTA	AGATGGCATT	TCTATCTCAG	AGGGCCAAAG	TGAATCACAC	2280
	CAGTTTCTGA	AGGTCTTAAA	AATAGCTCAG	ATGCTCTAAT	GAACATGCAC	CTACATTTAA	2340
80	TAGGAGTACA	ATAAACTCTG	TGTCAGCTTT	TGTTTACAG	AGAACGCTAG	ATATTAGAAA	2400
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	AAAAAATGAT	CCAAATATAT	GATATGATTG	GATGTATGTA	ACACATACAT	GGAGTAAGGA	2520
	GGAAATTTTC	TGAAAAATAC	ATTTAGATTA	GTATTAGTTG	AAGGAGAGGT	GGGCTGATGG	2580
	CTGAGTTGTA	TGTTACTAAC	TTGGCCCTGA	CTGGTTGTGC	AACCATTTGT	TCATTTCTTT	2640
	GCAAAATGTA	GTTAAGATAT	ACTTTATTCT	AATGAAGGCC	TTTTAAATTT	GTCCACTGCA	2700

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Seq ID NO: C121 DNA Sequence

Nucleic Acid Accession #: NM_004195

Coding sequence: 1..726

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Seq ID NO: C122 DNA Sequence

Nucleic Acid Accession #: AK091896.1

Coding sequence: 28..1572

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Seq ID NO: C123 DNA Sequence

Nucleic Acid Accession #: NM_002203.2

Coding sequence: 43..3588

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	CASTTTGGGT	ATGCACTGCA	GCAGTTTATA	AATCCAAAAG	GCAACTGGTT	ACTGGTTGGT	240
	TCACCCCTGA	GTGGCTTTCC	TGAGAACCGA	ATGGGAGATG	TGTATAATG	TCCGTGTGAC	300
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	ACTGAGATGA	AAACCAACAT	GAGCCTCGGC	TTGATCCTCA	CCAGGAACAT	GGGAACCTGA	420
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20	GAAGCAGCTG	TACTAGAAAA	GGCTGGGACA	TTAGGAGAAC	AAATTTTCAG	CATTGAAAGT	1140
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30	GAGGCGATTC	AAAACACTCG	ATTGGTTTCA	GCAATTGCGA	CTCTTTTACA	CATCAACATG	1740
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35	CTCTGGTCA	AAAGTATTCG	TGATGTAGCT	ATAGAAAGCT	CAITTCACAC	AGAAAAAATC	2040
	ACTTTGGTCA	ACAAGATGTC	TCAGATAATT	CTCAAACTCT	GCITTCAGTG	AAAGTTTACA	2100
	CCTACTAAGC	AAACCAATCA	AGTGCCCAT	GTATATAACA	TCACACTTGA	TGCAGATGGA	2160
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40	CCCTCTGATG	TTGTCAACTC	TTTGGATTG	CGTGTGGACA	TCAGTCTGGA	AAACCTGGCC	2340
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70	ACAGGTTTTT	TCAATTTATG	CTGCTCATCC	AAAGTTGCCA	CAGATGATAC	TTCCAAAGTGA	4140
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80	GGGAAAGTCA	TCATGTTTAA	TTACACACTT	GCATGAATTA	CTGTATATAA	ACTCCTTAAC	4740
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 Coding sequence: 103..1101

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 Nucleic Acid Accession #: NM_007197
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GATCAACCTG	AAAGAGTCCA	ACCAATCGCA	TCATCTACCT	TGATCCATTC	CGACCTGACA	1380
TCGGTTTATG	GCACCGTGCT	AATGAACAGG	ACTGTTTATC	TCCTGGGGAG	TGGAGATGGC	1440
CAGTTACTTCA	AGGTTATCTT	TGCTGAGAAAT	TTGACTCAAA	ATTGTCAGAG	GCTGATCTAT	1500
GAAATTAAGA	AAGAGACACG	TGTTTTCATC	AAACTCGTTC	CTGATCTGCT	GAGAAATATC	1560
TACATTTATC	TAAACGATCC	GAAAGAGGTA	AGGAGAAATC	GTGTTTGCAA	TCGCAATAAA	1620
CATAAATCCT	GTTCGGAGTG	TTTAACAGCC	ACAGAGCCCT	ACTGGGGTTG	GTGCGCATTG	1680
CTACAAAGGT	GCATCTTTCA	AGGAGATGCT	GTACATTCAG	AGAACTTAGA	AAACTGGGCT	1740
GATATTTCTG	CTGGAGACAAA	AAAGTCCGCT	AAATTCAGA	TAAATCGAAG	CAGTAAGAAA	1800

5	AAGACTACAG	TGACTATGCT	GGGAAGCTTC	TCTCCAGAC	ACTCAAAGTG	CATGGTGAAG	1860
	AATGTGGACT	CTAGCAGGGA	GCTCTGCCAG	AATAAAAGTC	AGCCCAACCG	GACCTGCACC	1920
	TGTAGCATCC	CAACAGAGC	AACTACAAA	GATGTTTCAG	TGTCAACGT	GATGTTCTCC	1980
	TTGGGTTCTT	GGAAATTAAC	AGACAGATTC	AACITTTACCA	ACTGCTCATC	ATTAAAGAA	2040
	TGCCAGCAT	GGGTAGAAAC	TGGCTGCGCG	TGGTGTAAAA	GTGCAAGAA	GTGTATCCAC	2100
	CCCTTCACAG	CTTGCGACCC	TTCTGATTAAT	GAGAGAAACC	AGGAACAGTG	TCCAGTGGCT	2160
	GTGAGAAAGA	CATCAGGAGG	AGGAAGACCC	AAGGAGAAACA	AGGGGAACAG	AACCAACCAG	2220
	GCCTTTACAG	TCTTTACAT	TAACTCCATT	GGGCCACAGA	AAGTATCGAC	ATTAGGGAAA	2280
10	AGCAACGTGA	TAGTAACGGG	AGCAAACTTT	ACCCGGGCAT	CGAACATCAC	AATGATCCG	2340
	AAAGGAACCA	GTACCTGTGA	TAAGGATGTG	ATACAGGTGA	GCCATGTGCT	AAATGACACC	2400
	CACATGAAT	TCTCTCTCC	ATCAAGCCCG	AAAGAAATGA	AGGATGTGTG	TATCCAGTTT	2460
	GATGGTGGGA	ACTGCTCTTC	TGTGGGATTC	TTATCCTACA	TGCTCTGCC	ACATTGTTCC	2520
	CTTATATTTC	CTGCTACAC	CTGGATCAGT	GGTGGTCAAA	ATATAACCAT	GATGGGCAGA	2580
15	AATTTTGTAT	TAATTAACAA	CTTAATCATT	TCACATGAAT	TAAAGGAA	CATAAATGTC	2640
	TCTGAATATT	GTGTGGCGAC	TTACTGCGGG	TTTTTAGCCC	CCAGTTTAAA	GGGTTCAAAA	2700
	GTGCGACGA	ATGTACTGT	GAAGCTGAGA	GTACAGACA	CCTACTTGG	TTGTGGAACC	2760
	CTGCAGTATC	GGGAGGACCC	CAGATTCAAG	GGGTATCGGG	TGGAATCCGA	GGTGGACACA	2820
	GAACCTGGAAG	TGAAATATCA	AAAGAAATAT	GACAACTTCA	ATATTTCCAA	AAAGACATT	2880
20	GAAATTAATC	TCTTCCATGG	GGAAATGGG	CAATTAAAT	GCAGTTTGA	AAATATTACT	2940
	AGAAATCAAG	ATCTTACAC	CATCCTTGG	AAATTAAG	GCATCAAGAC	TGCAAGCACC	3000
	ATTGCCAAT	CTTCTAAGAA	AGTTCCGGTC	AAGCTGGAA	ACCTGGAGCT	CTACGTCGAG	3060
	CAGGAGTCAG	TCTCTTCCAC	ATGGTATTTT	CTGATTGTGC	TCCCTGTCTT	GCTAGTGATT	3120
	GTCTTTTGTG	CGCCCGTGG	GGTGACCAAG	CACAAATCGA	AGGAGCTGAG	TCCCAACAG	3180
25	AGTCAACAC	TGAAATATCT	GGAAAGCGAG	CTCCGGAAAG	AGATACGTGA	CGCTTTGCT	3240
	GAGCTGCAGA	TGGATAAAT	GGATGTGTT	GATAGTTTGG	GAACGTGTC	CTTCTTGAC	3300
	TACAAACATT	TGCTCTGAG	AACCTTCTTC	CCTGAGTCAG	GAGGCTTCC	CCCATCTTC	3360
	ACTGAAGATA	TGCATAACAG	AGACGCCAAC	GACAAGAAATG	AAAGTCTCAC	AGCTTTGGAT	3420
	GCCTTAATCT	GTAATAAAG	CTTCTCTGTT	ACTGTCTATC	ACACCTTGA	AAAGCAGAG	3480
30	AACCTTTCTG	TGAAGGACAG	GTGCTGTGTT	GCCTCTCTTC	TAAACATTGC	ACTGCAAAAC	3540
	AGCTGTGCT	ACCTGACAC	CATCCTAGAG	GTGCTGACCA	GGGACTTGAT	GGAACAGTGT	3600
	AGTAACATGC	AGCCGAACT	CATGCTGAGA	CGCACGGAGT	CCGTGCTGGA	AAAACCTCTC	3660
	ACAAACTGGA	TGTCGCTGT	CCTTCTGGA	TTTCTCGGG	AGACTGTGG	AGAGCCCTTC	3720
	TATTTGCTGG	TGACGACTCT	GAACCAAGAA	ATTAAACAGG	GTCCCGTGG	TGTAACTCACT	3780
35	TGCAAGCCCC	TGATCAGACT	TAATGAAGAC	TGGCTGTTGT	GGCAGGTTCC	GGAATTCAGT	3840
	ACTGTGCGAT	TAAACGTGCT	CTTTGAAAA	ATCCCGAAA	ACGAGAGTGC	AGATGTCTGT	3900
	CGGAATATT	CAGTCAATGT	TCTCGACTGT	GACACCATTT	GCCAGCCAA	AGAAAGATT	3960
	TTCCAGGCT	TCTTAAGCAA	AAATGGCTCT	CCTTATGGAC	TTGAGCTTAA	TGAAATTTGT	4020
	CTTGAGCTTC	AAATGGGAC	ACGACAGAAA	GAACTTCTGG	ACATCGACAG	TTCTCTCGTG	4080
40	ATTCTTGAG	ATGGAATCAC	CAGCTAAAC	ACCATTGGCC	ACTATGAGAT	ATCAAAATGGA	4140
	TCCACTATAA	AAGTCTTTAA	GAGATAGCA	AATTTACTT	CAGATGTGGA	GTACTCGGAT	4200
	GACCACTGCC	ATTGATTTT	ACCAGATTCC	GAAGCAATCC	AGATGTGCA	AGGAAAGAGA	4260
	CATCGAGGGA	AGCACAAGTT	CAAAAGTAAA	GAAATGTATC	TGACAAAGCT	GCTGTGGAAC	4320
	AAGGTGGCAA	TTTACTTCTG	GCTTGAAAA	CTTTTGAAGA	GCATTGAGG	TTTACCCAAC	4380
45	AGCAGAGCTC	CATTGTGACT	AAAATACTTT	TTTGACTTTT	TGGAGGCCCA	GGCTGAAAAC	4440
	AAAAAATCA	CAGATCCGGA	CBTGTACAT	ATTTGAAAA	CAACAGCCT	TCTCTTCCG	4500
	TTCTGGGTAA	ACATCTCGAA	GAACCTCAG	TTTGTCTTG	ACATTAAAG	GACACCACT	4560
	ATAGACGGCT	GTGTCAGT	GATTGCCAG	GCATTCATGG	ATGCATTTTC	TCTCACAGAG	4620
	CAGCACTAG	GGAGGAGAGC	ACCAACTAAT	AAGCTTCTCT	ATGCCAAGGA	TATCCCAAC	4680
50	TACAAAGAG	ATGGAATATC	TTATTAACAA	GCATTCAGGG	ATTGCTCTCC	ATTGTCATCC	4740
	TCAGAAATGG	AGAATTTTT	AACTCAGGAA	TCTAAGAAAC	ATGAAATGA	ATTTAATGAA	4800
	GAGGTGGCT	TGACGGAAT	TTACAAATAC	ATCTAATAAT	ATTTTGATGA	GATTCTAAT	4860
	AACTAGAGAA	GAGAACGAGG	GCTGGAAGAA	GCTCAGAAAC	AACCTTTCGA	TGTAAAGTTC	4920
	TTATTTGATG	AAAGAGAGAA	ATGCAAGTGG	ATGTAAGCAC	TCTGGGGCCT	GGCTTAATCT	4980
55	GGCAAGTTC	TTCAAGAGAC	TTGGGAGCAA	AATGGCTGCT	TGAGCTACTC	TGTGTGTTA	5040
	ATTGTGTTT	TGCACATAGG	TTCCACTTTG	GGCAGTCTCT	TTTTAAGAGA	CCAAGGCACA	5100
	TGCACAGCTT	TTAAGAGCA	A				5121

Seq ID NO: C128 DNA Sequence

Nucleic Acid Accession #: NM_002185.1

Coding sequence: 23..1402

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65	TTTACTTCMA	GTGTTTCTG	GAGAAAGTGG	CTATGCTCAA	AATGGAGACT	TGGAGATGC	120
	AGAACTGGAT	GACTACTCAT	TCTCATGCTA	TAGCCAGTTG	GAAGTGAATG	GATGCGACAG	180
	TTCACTGACC	TGTGCTTTTG	AGGACCCAGA	TGTCAACACC	ACCAATCTGG	AATTTGAAAT	240
	ATGTGGGGCC	CTCGTGGAGG	TAAAGTGCC	GAATTTCTAG	AAACTACAG	AGATATATTT	300
70	CATCGAGACA	AAGAAATCT	TACTGATTGG	AAAGAGCAAT	ATATGTGTGA	AGGTGGAGA	360
	AAAGAGTCTA	ACCTGCAAAA	AAATAGACCT	AAACCATATA	GTAAACCTG	AGGCTCTTT	420
	TGACCTGAGT	GTATCTATC	GGGAAGGAGC	CATGACTTT	GTGGTGACAT	TTAATACAT	480
	ACACTTGCNA	AGAAGTATG	TAAAAGTTTT	AATGCATGAT	GTAGCTTACC	GCCAGGAAAA	540
	GGATGAAAC	AAATGAGGCG	ATGTGAATTT	ATCCAGCACA	AAGCTGACAC	TCCTGCGAG	600
75	AAAGCTCCAA	CCGCGAGCAA	TGTATGAGAT	TAAAGTGG	TCCATCCCTG	ATCATTATT	660
	TAAAGGCTTC	TGGAGTGAAT	GGAGTCCAG	TTATTACTTC	AGAACTCCAG	AGATCAATAA	720
	TAGCTCGAGG	GAGTCTGATC	CTATCTTACT	AACCATCAGC	ATTTTGAGTT	TTTTCTCTGT	780
	CGCTCTGTGG	GTCTCTTGG	CCTGTGTGTT	ATGGAAAAAA	AGGATTAAAG	CTATCGTATG	840
	GCCGAGTCTC	CCGATCATA	AGAAGACTCT	GGAACATCTT	TGTAGAAAC	CAAGAAAAAA	900
80	TTTAAATGTG	AGTTTCAATC	CTGAAGTTT	CCTGGACTGC	CAGATTCAAT	GGGTGGATGA	960
	CATTCAAGCT	AGAGATGAAG	TGGAAGTTT	TCTGCAAGAT	ACGTTTCTCT	AGCAACTAGA	1020
	AGAACTGAG	ATCTCAGAGC	TGGAGGGGA	TGTGCAGAGC	CCCACTGCC	CATCTGAGGA	1080
	TGTAGTGTG	ACTCCAGAAA	GCTTTGGAAG	AGATTCAATC	CTCACATGCC	TGGCTGGGAA	1140
	TGTAGTGTGA	TGTGAGCCCC	CTATTCTCTC	CTCTTCCAGG	TCCCTAGACT	GCAGGGAGAG	1200
	TGGCAAGAAT	GGGCTCATG	TGTACCAGGA	CCTCTCTGCT	AGCCTTGGGA	CTACAAACAG	1260

5
 CACGCTGCC CCTCCATTTT CTCTCCAATC TGGAAATCTG ACATTGAACC CAGTTGCTCA 1320
 GGGTCAGCCC ATTCTTACTT CCTTGGGATC AAATCAAGAA GAAGCATATG TCACCATGTC 1380
 CAGCTTCTAC CAAAACCAAGT GAAGTGTAG AAACCCAGAC TGAACCTACC GTGAGCGACA 1440
 AAGATGATTT AAAAGGGAAG TCTAGAGTTC CTAGTCTCCC TCACAGCACA GAGAAGACAA 1500
 AATTAGCAAA ACCCCACTAC ACAGTCTGCA AGATTCTGAA ACATTGCTTT GACCACTCTT 1560
 CCTGAGTTCA GTGGCACTCA ACATGAGTCA AGAGCATCTT GCTTCTACCA TGTGGATTGG 1620
 GTCACAAGGT TTAAGGTGAC CCAATGATTG AGCTATTT 1658

10
 Seq ID NO: C129 DNA Sequence
 Nucleic Acid Accession #: NM_002722.1
 Coding sequence: 15..302

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 ACTCTGACT CCGGATGGCT GCCGCACGCC TCTGCTCTC CTGCTGCTC CTGTCCACCT 60
 GCGTGGCTCT GTTACTACAG CCACTGCTGG GTGCCAGGG AGCCCCACTG GAGCCAGTGT 120
 ACCCAGGGGA CAATGCCACA CCAGAGCAGA TGGCCAGTA TGCAGCTGAT CTCGCTAGAT 180
 ACATCAACAT GCTGACCAGG CCTAGCTATG GGAAGAGACA CAAAGAGGAC ACCTGCTGCT 240
 TCTGGAGTGG GGGTCCCGG CATGCTGCTG TCCCGAGGGA GCTCAGCCCG CTGGACTTAT 300
 20
 AATGCCACCT TCTGTCTCCT ACGACTCCAT GAGCAGCGCC AGCCAGCTC TCCCTCTGCT 360
 ACCCTTGGCT CTGGCCAAAG CTTGCTCCCT GCTCCACAC AGGCTCATA AAGCAAGTCA 420
 AAGCC 425

25
 Seq ID NO: C130 DNA Sequence
 Nucleic Acid Accession #: NM_032545.1
 Coding sequence: 47..718

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 AAATGATCT TCAATGCAT AAGAGAAGGA GACTCTCAA CCAAAATGA CCTGGAGGCA 60
 CCATGTGAG GTTCTGTATA CGGTCACTTT GGCATTACAG ATCATCATTT TGGGAAACAG 120
 CTTATCAAGA GAGAAACATA ACGGCGGTAG AGAGGAAGTC ACCAAGGTTG CCACTCAGAA 180
 GCACCGACAG TCACCGCTCA ACTGGACCTC CAGTCATTTT GGAGAGGTGA CTGGGAGGCG 240
 CGAGCGCTGG GGGCGGGAGG AGCGCTCCC CTACTCCCGG GCTTTCGGAG AGGCTGCGTC 300
 35
 CGCGGGGCGG CGCTGCTGCA GGAACGCGG TACCTGCGTG CTGGGCAGCT TCTGCGTGTG 360
 CCGGCGCCAC TTACCCGCGC GCTACTGCGA GCATGACCG AGGCGCAGTG AATGCGGCGC 420
 CCTGGAGCAC GAGGCTTGGG CCTTCCGCGC CTGCCACTTC TGCAGGTGCA TCTTCGGGGC 480
 CTTGCACTGC CTCCCTCTCC AGACGCTTGA CGCTGTGAC CGAAAGACT TCCTGGCTTC 540
 CCACGCTCAC GGGCCGAGCG CCGGGGGGCG GCCAGCCTG CTACTCTTGC TGCCCTGCGC 600
 40
 ACTCTGTCAC CGCTCTCTGC GCGCGGATGC GCGCGGCGAC CCTCGGTCCC TGGTCCCTTC 660
 CGTCTCTCAG CCGGAGCGGC GCGCCCTGCG AAGGCCGGGA CTGGGCACTC GCCTTTAATT 720
 TTTATGTTG TAAATAATAG ATGTGTTTAG TTTACCGTAA GCTGAAGCAC TGGGTGAATA 780
 TTTTATGTT GTAATAAATA TTTTCATGAA AGCGCCAAAA AAAAAAATAA AAAAAAATAA 840
 AAAAAA 846

45
 Seq ID NO: C131 DNA Sequence
 Nucleic Acid Accession #: NM_006533.1
 Coding sequence: 72..467

50
 1 11 21 31 41 51
 | | | | |
 AGGGAGAGAG GGAGGGGAGG AAATTGGAGA CCCCAGCACC CCCTTGCTCA CTCTCTTGCT 60
 CACAGTCCAC GATGGCCCGG TCCCTGGTGT GCCTTGGTGT CATCATCTTG CTGTCTGCTT 120
 TCTCCGGACC TGGTGTGAGG GGTGGTCTTA TGGCCAGCT GGCTGACCGG AAGCTGTGTG 180
 55
 CGGACCGAGA GTGCAGCCAC CCTATCTCCA TGGCTGTGGC CCTTCAGGAC TACATGGCCC 240
 CCGACTGCGG ATTCTGTGAC ATTCACTGGG GCCAAGTGGT GTATGTCTTC TCCAGCTGTA 300
 AGGGCGCTGG GCGGCTCTTC TGGGGAGGCA GCGTTCAGGG AGATTACTAT GGAGATCTGG 360
 CTGCTCGCCT GGGCTATTTC CCAGTAGACA TTGTCCGAGA GGACCAAGAC CTGAACCTCG 420
 GCAAGTCTGA TGTGAAGACA GACAAATGGG ATTTCTACTG CCAGTGAGCT CAGCCTACCG 480
 60
 CTGGCCCTGC CGTTTCCCTT CCTTGGGTTT ATGCAAAATC AATCAGCCCA GTGCAAAC 538

65
 Seq ID NO: C132 DNA Sequence
 Nucleic Acid Accession #: AB064272
 Coding sequence: 1..708

70
 1 11 21 31 41 51
 | | | | |
 ATGACACAAG TCACAGAAAA GTCCACAGAA CACCCAGAAA AGACCAAGTC AACCCAGAG 60
 AAAACCAAAA GAACCCAGAA AAGGCTACG CTATACTCAG AGAAGACCAT ATGCACCAA 120
 GGGAAAAACA CACCAATGCC AGAAAAGCCT ACAGAAAACC TGGGGAACAC CACACTGACC 180
 ACTGAGACCA TAAAAGCCCC AGTAAAGTCC ACAGAAAACC CAGAAAAAAC AGCAGCAGTC 240
 ACABAAGACTA TAAAACCTTC AGTCAAGGTC ACAGGAGACA AATCTCTCAC TACTACCTCT 300
 TCTCATCTAA ATAAAACCTGA AGTTACTCAT CAGGTGCCCA CTGGTCTCTT CACCTCTCAT 360
 ACATCTAGAA CGAAGCTGAG TTCTATCACA TCAGAAGCCA CAGGAACGGA GAGCCATCCA 420
 75
 TACCTCATAA AAGATGGCTC ACAGAAAGGT ATCCACGCTG GACAGATGGG AGAGAATGAT 480
 TCATTCCCCTG CATGGGCCAT AGTTATTGTG GTCCGCTGGG CTGTGATTCT CCTCTGGTG 540
 TTCCTTGGCC TGAATCTCTT GGTCTCTAT ATGATGCGGA CACGCGCAG ACTAACCCAG 600
 AACACCCAGT ACAATGATGC AGAGGATGAG GGTGGCCCA ATTCTTACCC GGTCTACCTG 660
 80
 ATGGAGTCAG AGAATCTTGG CATGGGCCAG ATCCCTTCCC CACGGTGA 708

Seq ID NO: C133 DNA Sequence
 Nucleic Acid Accession #: NM_080870.1
 Coding sequence: 3..710

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	AGAAAACCCAC	AGAAACCCCA	GAAAAGCCTA	CGCTATACCT	AGAGRAGACC	ATATGCACCA	120
	AAGGGAAAAA	CACACCACTC	CCAGAAAAGC	CTACAGAAAA	CCTGGGGAAC	ACCACACTGA	180
	CCACTGAGAC	CATAAAAGCC	CCAGTAAAGT	CCACAGAAAA	CCCAGAAAAA	ACAGCAGCAG	240
	TCACAAAGAC	TATAAAACCT	TCAGTCAAGG	TCACAGGAGA	CAAACTCTCT	ACTACTACCT	300
10	CTTCTCATCT	AAATAAAACT	GAAGTTACTC	ATCAGGTGCT	CACTGGTTCT	TTCAOCTCA	360
	TTACATCTAG	AACGAAGCTG	AGTTCTATCA	CATCAGAACG	CACAGGAAC	GAGAGCCATC	420
	CATACCTCAA	TAAAGATGGC	TCACAGAAAG	GTATCCACGC	TGGACAGATG	GGAGAGAATG	480
	ATTTCATTCC	TGCATGGGCC	ATAGTTATTG	TGGTCTGGT	GGCTGTGATT	CTCCTCTGG	540
	TGTTCTTGG	CTGATCTCT	TTGGTCTCT	ATATGATGCG	GACACGCGCG	ACACTAACCC	600
15	AGAACACCCA	GTACAATGAT	GCAGAGGATG	AGGGTGGCCC	CAATTCCTAC	CCGGTCTACC	660
	TGATGGAGCA	GCAGAACTCT	GGCATGGGCC	AGATCCCTTC	CCCACTGTGA	TCTTGGAGTA	720
	GGCGCCCGAC	CTTGGCTCTT	CCATGCTCTG	CCCTTTCTCT	GGATGAGGAA	CCGACTACAC	780
	AAATTTCTAT	TCCGGGACTA	CAGGAAGGGC	AGAGAATACT	GACGTTTACC	AGTATTAAAC	840
	CTTCATCTGT	TCTTGAACCT	GGTGGGGGAA	TGAGGTGATA	AGCAAGGAGG	GTGTAAGTTT	900
20	AGGGGACAAA	GAATGAAGAA	TGAATAATAC	GAGCAGACAT	TCTCTGTAGA	AGGTAATGGT	960
	CTGAGAAATGA	AAAGGTGTTT	GATGGACATG	TTGTGGGGGC	ACCAATGCAG	AACACTGCAC	1020
	TGAGTCTCTA	AGGAAGGACA	GGAGCCTTAT	AGGCAATGCC	CCAGACTGAC	TTGTGAGTGG	1080
	GGTTTATGG	GAAAGGGAGG	GACTGAGGGC	AGAGTCTCTG	GGTTTCAGGA	CAGCATTATG	1140
	TTATTTCCAT	TCACATATAC	TAAAGAGTTT	GTGTGTAAC	AGGCTCATCT	CTGAGTTCTC	1200
25	AGGACCTCTG	CCCCACCCCC	CATTTTCTTA	ATGAAAAAAA	AAAAACAAAA	AAACGGATCC	1260
	AAGAAGAAAA	GAGAAATTTAT	TTCCTTCTCC	ACTCTCTCCA	TGCCCTGGAG	AAAAAAAGT	1320
	CCAGAAGAAA	TCATAAATAT	CTCTCATCTA	CAAGGTTGCT	TCCCTTCTCT	CCCAATCCC	1380
	TTAGTTTCTC	TAAATGTCTA	CAGTGGACGC	CCTGTTGGTT	TGGCTTGGCT	GGTTGGGGT	1440
	GGACACGCAA	GGAGGGGATT	TTTATTTGGC	CAGCAGTCTC	ACCCACTGAT	CTCCACCCCA	1500
30	GACCTTCCCT	GATTTGGTGC	TCAGCATTTA	TTTTCTGTCT	TCTTCCACCA	AAAGCCAGCT	1560
	GTAGCTTTAT	CTCGTAAAG	TTACCCATCT	TCCTACTGTT	CCCATTTCTC	TCTCTCCCA	1620
	CCTTCACCCC	AGATTCAAGT	TTTCTTCTCT	GTAGGCATTT	CATCTGTGTG	TGTTTTCTGG	1680
	ATTTCTCTCT	TCCTTCTCTA	TGGCCATTTC	ACCTTATTAC	TGATTTGGTA	GAGGGGAAA	1740
35	AGGAGAAATGA	TGATGATAGT	TTCCTTCTGT	CTATTGACCT	TTTTTATAAT	AAAGTATAAC	1800
	ATGTT						1805

Seq ID NO: C134 DNA Sequence
Nucleic Acid Accession #: FGENESH predicted
Coding sequence: 1..10674

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	GGGGCCCCCG	GGAGTATCCC	CGCGCGCCCC	GCTCCTGGCG	ACGAAGCGGC	GGGGAGCAGA	180
	GTGGAGCGCG	TGGGCCAGGC	GTTCGGCGGA	CGCGTGCAGC	TGCTGCGGGA	GCTCAGCGAG	240
	CGCTGGAGC	TGTTCTTCT	GGTGGATGAT	TGGTCCAGCG	TGGGCGAAGT	CAACTTCCGC	300
	AGCGAGCTCA	TGTTCTGCTG	CAAGCTGCTG	TCCGACTTCC	CGGTGGTCCC	CAAGGCCAAG	360
50	CGCGTGGCCA	TGTTGACCTT	CTCTTCCAA	AACTAGCTGG	TGCGCGCGCT	CGATTACATC	420
	TCCACCCGCC	GGCGCGGCCA	GCACAAGTGC	GGCTGCTTCC	TCCAGAGAT	CCCTGCCATC	480
	TCCTACCGAG	GTGGCGGCAC	CTACACCAAG	GGCGCCTTCC	AGCAAGCGCG	GCAAAATCTT	540
	CTTCATGCTA	GAGAAAACCT	AACAAAAGTT	GTATTTCTCA	TCACGTATGG	ATATTCCAA	600
	GGGGGAGACC	CTAGACCAAT	TGCAGCGTCA	CTGCGAGATT	CAGGAGTGGG	GATCTTCACT	660
55	TTTGGCATAT	GGCAAGGGAA	CATTGAGAG	CTGAATGACA	TGGCTTCCAC	CCCAAGGAG	720
	GAGCAGCTGT	ACCTGCTACA	CAGTTTGA	GAATTTGAGG	CTTTAGCTCG	CGGGGCATTG	780
	CATGAGATC	TACCTTCTGG	GAGTTTAT	CAAGATGATA	TGGTCCACTG	CTCATATCTT	840
	TGTGATGAAG	GCAAGGACTG	CTGTGACCGA	ATGGGAGCT	GCAAAATGTT	GACACACACA	900
	GGCCATTTTG	AGTGCATCTG	TGAAAAGGGG	TATTACGGGA	AAAGTCTGCA	GTATGAATGC	960
60	ACAGCTTTGC	ATCGGGGAC	ATACAAAACCT	GAAGGCTCAC	CAGGAGGAAT	CAGCAGTTGC	1020
	ATTCATGTCT	CTGATGAAA	TCACACTCT	CCACTTGGAA	GCACATCCCC	TGAAGACTGT	1080
	GTCTGCAGAG	AGGGATACAG	GGCATCTGGC	CAGACCTGTG	AACTTGTCCA	CTGCCCCGCC	1140
	CTGAAGCCTC	CGAAAATG	TTACTTTATC	CAAAACACTT	GCAACAACCA	CTTCAATGCA	1200
	GCCTGTGGGG	TCCGATGTCA	CCCTGGATTT	GATCTTGTGG	GAAGCAGCAT	CATCTTATGT	1260
65	CTACCCATG	GTTTGTGGTC	CGGTTCCAGG	AGCTACTGCA	GAGTAAGAAC	ATGTCTTCAT	1320
	CTCGCCAGC	CGAAACATGG	CCACATCAGC	TGTTCTACAA	GGGAATGTT	ATATAAGACA	1380
	ACATGTTTGG	TGGCTGTGA	TGAAGGCTAC	AGACTAGAA	GCAGTGTATA	GCTTACTTGT	1440
	CAAGGAACA	GCCAGTGGGA	TGGGCCAGAA	CCCGGTGTG	TGGAGCGCCA	CTGTTCCACC	1500
	TTTCAGATGC	CCAAAGATGT	CATCATATCC	CCCCCAACT	GTGGCAAGCA	GCCAGCCAAA	1560
70	TTTGGGACGA	TGCTGTATGT	AAGTTGCCGC	CAAGGGTTCA	TTTTATCTGG	AGTCAAAGAA	1620
	ATGCTGAGAT	GTACCACTTC	TGGAAATGG	AATGTCGGAG	TTTCCGCGAG	TGTGTGTAAA	1680
	GACGTGGAGG	CTCTCAAT	CACTGTCTCT	AAGGACATAG	AGGCTAGAC	TCTGGAACAG	1740
	CAAGATTCTG	CCAATGTTAC	CTGGCAGATT	CCACAGCTA	ARGACAACCT	TGGTGAAAAG	1800
	GTGTGAGTCC	ACGTTCTATC	AGCTTTTACC	CCACCTTACC	TTTTCCCAAT	TGGAGATGTT	1860
75	GCTATCGTAT	ACACGGCAAC	TGACCTATCC	GGCAACCAGG	CCAGCTGCAT	TTTCCATATC	1920
	AAGGTTATTT	ATGCAGAAC	ACCTGTCTAT	GACTGTGTGA	GATCTCCACC	TCCCTCCAG	1980
	GTCTCGGAGA	AGGTACATGC	CGCAAGCTGG	GATGAGCTTC	AGTTCTCAGA	CAACTCAGCG	2040
	GCTGAATTGG	TCATTACCCG	AAATCATACA	CAAGGAGACC	TTTTCCCTCA	AGGGGAGACT	2100
	ATAGTACAGT	ATACAGCCAC	TGACCCCTCA	GGCAATAACA	GGACATGTGA	TATCATATTT	2160
80	GTCTAAAAG	GTCTCTCCCT	TGAAATTTCA	TTACACCTGT	TAAATGGGGA	TTTTATATGC	2220
	ACTCCAGATA	ATACTGAGT	CAACTGTACA	TAACTTGTCT	TGGAGGGCTA	TGATTTACAT	2280
	GAAGGTTCTA	TATTTGTGCT	TATGAAGATG	CGCTCTGGAA	ACCAACATAT		2340
	ACCACTGAAT	GGCCAGACTG	TGCCAAAAAA	CGTTTTGCAA	ACCACGGGTT	CAAGTCTCTT	2400
	GAGATGTTCT	ACAAAGCAGC	TGTTGTGAT	GACACAGATC	TGATGGAGAA	GTTTTCTGAA	2460
	GCATTTGAGA	CGACCTTGGG	AAAAATGGTC	CCATCATTTT	GATGATGATG	AGAGGACATT	2520

	GACTGCAGAC	TGGAGGAGAA	CTGACCCAAA	AAATATTGCC	TAGAATATAA	TTATGACTAT	2580
	GAATAATGGCT	TTGCAATTGG	ACCAGGTGGC	TGGGGTGCAG	CTAATAGGCT	GGATTACTCT	2640
	TACGATGACT	TCCTGGACAC	TGTGCAAGAA	ACAGCCACAA	GCATCGGCAA	TGCCAAGTCC	2700
5	TCACBGATTA	AAAGAAGTGC	CCCATTTATCT	GACTATATAA	TTAAGTTAAT	TTTTAAATATC	2760
	ACAGCTAGTG	TGCCATTACC	CGATGAAAGA	AATGATACCC	TTGAATGGGA	AAATCAGCAA	2820
	CGACTCTTC	AGACATTGGA	AACATATCACA	AATAAACTGA	AAAGGACTCT	CAACAAGAC	2880
	CCCATGTATT	CCTTTCACT	TGCATCAGAA	ATACCTATAG	CCGACAGCAA	TTCATTAGAA	2940
	ACAAAAAAGG	CTTCCCCCTT	CTGCAGACCA	GGCTCAGTGC	TGAGAGGGCG	TATGTGTGTC	3000
10	AAATGGCCCTT	TGGGAACCTA	TTATAATCTG	GAACATTTCA	CCTGTGAAAG	CTGCCGGATC	3060
	GGATCCTATC	AAGATGAAGA	AGGGCAACTT	GAGTGCAGC	TTTGGCCCTC	TGGGATGTAC	3120
	ACGGAAATATA	TCCATTCAAG	AAACATCTCT	GATTGTAAAG	CTCAGTGTAA	ACAAAGGCACC	3180
	TACTCATACA	GTGGACTTGA	GACTTGTGAA	TGCTGTCCAC	TGGGCACTTA	TCAGCCAAAA	3240
	TTTGGTTCCC	GGAGCTGCCT	CTGCTGTCCA	GAACACACT	CAACTGTGAA	AAGAGGAGCC	3300
15	GTGAACATTT	CTGCATGTGG	AGTTCTCTGT	CCAGAAGGAA	AATTCTCGCG	TTCTGGGTTA	3360
	ATGCCCTATC	ACCCATGTGC	TCGTGACTAT	TACCAACCTA	ATGCAGGGAA	GGCGGTTGTC	3420
	CTGGCCTGTC	CCCTTTATGG	AACTACCCCA	TTGCTGTGTT	CCAGATCCAT	CACAGAATGT	3480
	TCAACTTCAG	TCTCTGAATAT	TACTATTTTC	GGTGGATTGG	GGCATCTGGA	GTGTGTAAT	3540
	TGTCCTCTCG	AGGTTTTCCT	TGAATGCTTC	TTTAACCTTT	GCCACAATAG	TGGAACCTGC	3600
20	CAGCAACTTG	GGCTGTGTTA	TGTTTGTCTC	TGTCACCTTG	GATATACAGG	CTTAAAGTGT	3660
	GAACAGACCA	TCGATGAGTG	CAGCCCACTG	CCTTGCCTCA	ACAAATGGAGT	TTGTAAAGAC	3720
	CTAGTTGGGG	AATTCATTGG	TGAGTGCCCA	TCAGGTTACA	CAGGTGAGCG	GTGTGAAGAA	3780
	AATATAAATG	AGTGTAGCTT	CAGTCTTGT	TTAAATAAAG	GAATCTGTGT	TGATGGTGTG	3840
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25	AATGAATGCC	AGTCAAACCC	ATGCTTAAAT	AATGCAGTCT	GTGAAGACCA	GGTGGGGGA	3960
	TTCTTGTGCA	AATGCCACCC	TGGATTTTGG	GGTACCCGAT	GTGGAAGAA	CGTGGATGAG	4020
	TGCTCTCAGT	AGGATGACAA	AAATGGAGCT	ACCTGTAAAG	ACGGTGCCAA	TAGCTTCAGA	4080
	TGCTGTGTGG	CAGTGTGCTT	CACAGGATCA	CACCTGTGAT	TGAACATCAA	TGAATGTGAG	4140
	TCTAATCCAT	GTAGAAATCA	GGCCACCTGT	GTGGATGAT	TAAATTCATA	CAGTTGTAAA	4200
30	TGTCAGCCAG	GATTTTCAGG	CAAAAGGTGT	GAACAGAAC	AGTCTACAGG	CTTTAACCTG	4260
	GATTTTGAAG	TTTCTGGCAT	CTATGGATAT	GTCTGCTAG	ATGGCATGCT	CCCATCTCTC	4320
	CATGCTCTAA	CCGTGACCTT	CTGGATGAAA	TGCTCTGAGC	ACATGAACCTA	TGGAACACCA	4380
	ATCTCTATG	CAGTGTATTA	CGGCAGCGAC	AATACCTTGC	TGCTGACTGA	TTATAACGGC	4440
	TGGGTCTTTT	ATGTGAATGG	CAGGGAAGAG	ATAACAACT	GTCCCTCGGT	GAATGATGGC	4500
35	AGATGGCATC	ATATTCGAT	CACCTTGGAC	AGTGCCTAAG	GCATCTGGAA	AGTCTATATC	4560
	GATGGGAAT	TATCTGACGG	TGGTGTGCGC	CTCTCTGTTG	GTCTGCTCAT	ACCTGGTGGT	4620
	GGTGCTTTAG	TTCTGGGCGA	AGAGCAAGAC	AAAAAAGGAG	AGGGATTTCAG	CCGAGCTGAG	4680
	TCCTTTGTGG	GCCTCATTAAG	CCAGCTCAAC	CTCTGGGACT	ATGCTCTGTC	TCCACAGCAC	4740
	GTGAAGTCAC	TGGCTACCTC	CTGCCCTGAG	GAATCAGTA	AAGGAACGCT	GTAGCATGG	4800
40	CCGATTTCT	TGTCGGAAT	TGTGGGGAAA	GTGAAGATCG	ATTCTAAGAG	CATATTTTGT	4860
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	AAGCCAGGTT	CCAAAGTCAA	TCTGTTCTGT	GATCCAGGCT	TCCAGCTGCT	CGGGAACCTT	4980
	GTGCAGTAT	GTCTGAATCA	AGGACAGTGG	ACACAAACAC	TTCCTCACTG	TGAACGCATT	5040
	AGCTGTGGGG	TGCCACCTCC	TTTGGAAGAT	GGCTTCCATT	CAGCCGATGA	CTTCTATGCT	5100
45	GGCAGCACAG	TAACTTACCA	GTGCAACAAT	GGCTACTATC	TATTGGGTGA	CTCAGGATG	5160
	TTCTGTACAG	ATAATGGGAG	CTGGAACGGC	GTTCACCAT	CCTGCCCTGA	TGTGATGAG	5220
	TGTGCACTGT	GATCAGATTG	TAGTGAGCAT	GCTTCTTGCC	TGAACGTAGA	TGGATCTTAC	5280
	ATATGTTTAT	GTGTCCTTCC	GTACACAGGA	GATGGGAAAA	ACTGTGCGAG	ACCTATAAAA	5340
	TGTAAGGCTC	CAGGAAATCC	GGAAATGGCC	CACCTCTCAG	GTGAGATTTA	TACAGTAGGT	5400
50	GCCCGAGTCA	CAITTTCTGT	TGAGGAAGGA	TACCACTTGA	TGGAGTAAAC	CAAAATCACA	5460
	TGTTTGGAGT	CTGGAGAAATG	GAATCATCTA	ATACCATATT	GTAAAGCTGT	TTCATGTGGT	5520
	AAACCGGCTA	TTCCAGAAATA	TGTTTGCATT	GAGGAGTTAG	CATTTACTTT	TGGCAGCAAA	5580
	GTGACATATA	GGTGTAAATA	AGGATATACT	CTGGCCGGTG	ATAAAGAACT	ATCTGTCTCT	5640
	GCTAACAGTT	CTTGGAGTCA	TTCCCTCTCT	GTGTGTGAAC	CAGTGAAGTG	TTCTAGTCCG	5700
55	GAATAATATA	ATAATGGAAA	ATATATTTTG	AGTGGGCTTA	CCTACTTTTC	TACTGCATCA	5760
	TATTCATGCG	ATACAGGATA	CAGCTTACAG	GGCCCTTCCA	TTATTGAATG	CACGGCTTCT	5820
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	ATCAAAGATG	CTGTGATTAC	GGGGAATAAC	TTCACTTTCA	GGAAACACCT	CACCTTCACT	5940
	TGCAAGGAAG	GCTATATCTT	TGCTGGTCTT	GACACCATG	AATGCTGGGC	CGACGGCAAG	6000
60	TGGAGTAGAA	GTGACACAGA	GTGCTCTGCT	GTCTCTGTG	ATGAGCCACC	CATTGTGGAC	6060
	CACGCCCTCT	CAGAGACTGC	CCATGGGCTC	TTTGGAGACA	TTGCATTCTA	CTACTGCTCT	6120
	GATGGTTACA	GCTTAGCAGA	CAATTCCGAC	CTTCTCTGCA	ATGCCAGGG	CAAGTGGGTA	6180
	CCCCCAAGAG	GTCAAGACAT	GCCCCGTTGT	ATAGCTCAAT	TCTGTGAAAA	ACCTCCATCG	6240
	GTTCCTTATA	GCTCTTGGGA	ATCTGTGAGC	AAAGCAAAAT	TTGCACTGGG	CTCAGTTGTG	6300
65	AGCTTTAAAT	GCATGGAAGG	CTTTGTACTG	AACACCTCAG	CAAAAGATTGA	ATGATATGAG	6360
	GGTGGGCGGT	GGAAACCTTC	CCCCATGTCC	ATCCAGTGCA	TCCCTGTGCG	GTGTGGAGAG	6420
	CCACCAAGCA	TCATGAATGG	CTATGCAAGT	GGATCAAACT	ACAGTTTGGG	AGCCATGGTG	6480
	GCCTACAGCT	GTCAAGAGGG	GTCTTACATC	AAAGGGGAAA	AGAAGAGCAC	CTGCGAAGCC	6540
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70	AAGGTGAGAT	ATGGCTTTCT	GGAGCATACA	ACTGGCAGGA	TCTTTGAGAG	TGAAGTGAGG	6660
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	CGCCACTGGC	ACAGTGAATC	CCCTCTGATG	TGTGTTCTCT	TGACTGTGG	AAACCTCTCC	6780
	CCGATCCAGA	ATAGCTTTCAT	GAAGAGGAGA	AACCTTGAAG	TAGGGTCCAA	GGTTCAGTTT	6840
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75	AAATGGAATA	AGAACTCAAA	TCCAAAGTGC	ATGCCCTGCCA	AGTGCCTAGA	GCGGCCCTC	6960
	TTGGAAGAAC	AGCTAGTATT	AAAGGAGTTG	ACCACGAGG	TAGGAGTTGT	GAATTTTTC	7020
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	TGGAATGACT	TTTCCCTGT	TTGTAAGATT	GTCTTTTSTA	CCCCACCTCC	CCTAATTTCC	7140
	TTTGGTGTCC	CCATCTCTTC	TTCTGCTCTT	CATTTTGGAA	GTACTGTCAA	GTATTTCTGT	7200
80	GTAGGTGGGT	TTTCTCTAAG	AGGAAATTTT	ACCACCTCT	GCCAACTCTG	TGGCACCTGG	7260
	AGCTCTCCAC	TGCCAGAAATG	TGTTCCAGTA	GAATGTCCCC	AACCTGAGGA	AATCCCAAT	7320
	GAATCATTTG	ATGTGCAAGG	CCTTGCTAT	CTCAGCACAG	CTCTTATATC	CTGCAGGCA	7380
	GGCTTTGAAT	TGGTGGGAAA	TACTACCAAC	CTTTGTGGAG	AAATATGTCA	CTGGCTTGGG	7440
	GGAAACCAAA	CATGTAAAGC	CATTGAGTGC	CTGAAACCCA	AGGAGATTTT	GAATGGCAAA	7500
	TTCTCTTACA	CGGACCTACA	CTATGGACAG	ACCGTTACCT	ACTCTTGCAA	CGAGGCTTT	7560

5 CGGCTCGAAG GTCCCAATGTC CTTGACCTGT TTAGAGACAG GTGATTGGGA TGTAGATGCC 7620
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Seq ID NO: C135 DNA Sequence
 Nucleic Acid Accession #: FGENESH predicted
 Coding sequence: 1..390

60 1 11 21 31 41 51
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 GAACCATGGC TGTGCCAGCC GGCACCCAGG TGTGGAGACA AGATCTACAA CCCCTTGGAG 180
 CAGTGTGTTT ACAATGACGC CATCTGTCTC CTGAGCGAGA CCGGCCAATG TGGTCCCCCC 240
 65 TGACCTTCTT GGCCTTGTCT TGAGCTCTGC TGTCTTGATT CCTTTGGCCT CACAAACGAT 300
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Seq ID NO: C136 DNA Sequence
 Nucleic Acid Accession #: BC035671.1
 Coding sequence: 126..1745

75 1 11 21 31 41 51
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 TCTTGGCTTT GCTGCTCGCG GTCTCGGCCC CGCTCGGGCT GCGAGCGGAG GAGCTGGGTG 240
 80 ATGGCTGTGG ACACCTAGTG ACTTATCAGG ATAGTGGCAC AATGACATCT AAGAAATTATC 300
 CCGGGACCTA CCCCAATCAC ACTGTTTGCG AAAAGACAA TACAGTACCA AAGGGGAAAA 360
 GACTGATTCI GAGGTTGGGA GATTGGATA TCGAATCCCA GAOCCTGTGCT TCTGACTATC 420
 TTCTCTTCAC GACTCTTCA GATCAATATG GTCCATACTG TGGAGATGAT ACTGTTCCCA 480
 AAGAACTCTE GTTGAACACA AGTGAAGTAA CCGTCCGCTT TGAGAGTGGG TCCACATTT 540
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5	TGGAACGAGC	TAGCCATTAT	TTGAAGACAG	AATACAGCAA	ATTCTGCCCA	GCTGGTTGTA	660
	GAGACGTAGC	AGGAGACATT	TCTGGGAATA	TGGTAGATGG	ATATAGAGAT	ACCTCTTTAT	720
	TGTGCAAAAGC	TGCCATCCAT	GCAGGAATAA	TTGCTGATGA	ACTAGGTGGC	CAGATCAGTG	780
	TGCTTCAGCG	CAAAGGGATC	AGTCGATATG	AAGGGATTCT	GGCCAAATGGT	GTTCTTTGGA	840
	GGGATGGTTC	CTGTGCAGAC	AAGCGATTTC	TGTTTACCTC	CAATGGTTGC	AGCAGATCCT	900
	TGAGTTTGA	ACCTGACGGG	CAATCAGAG	CTTCTTCCTC	ATGGCAGTGG	GTCAATGAGA	960
	GTGGAGACCA	AGTTCACCTG	TCTCCTGGCC	AAGCCCGACT	TCAGGACCAA	GGCCCATCAT	1020
	GGGCTTCGGG	CGACAGTAGC	AACACCCACA	AACACCGAGA	GTGGCTGGAG	ATCBAATTTG	1080
	GGGAGAAAAA	GAAATAAACA	GGAAATTAGGA	CCACAGGATC	TACACAGTCG	AACCTCAACT	1140
10	TTTATGTTAA	GAGTTTGTG	ATGAACITCA	AAAAAATAA	TTCTAAGTGG	AAGACCTATA	1200
	AAGGAATTGT	GAATTAATGA	GAAAGGTTGT	TTGAGGTTAA	CTCTAACTTT	CGGAGCCAG	1260
	TGCAAAACAA	TTTCATCCCT	CCCATCCTGG	CCAGATATGT	GCGGGTTGTC	CCCCAGACAT	1320
	GGCACCAGAG	GATAGCCTTG	AAGGTGGAGC	TCATTGGTTG	CCAGATTACA	CAAGGTAAATG	1380
	ATTCAATGGT	GTGGCGCAAG	ACAAGTCAAA	GCACCAAGTG	TTCAACTAAG	AAAGAAGATG	1440
15	AGACAATCAC	AAGGCCCATC	CCCTGGGAAG	AAACATCCAC	AGGAATAAAC	ATTACAACGG	1500
	TGGCTATTCC	ATTGGTGGTC	CTTGTGTGTC	TGGTGTGTGC	TGGAATGGGG	ATCTTTGACG	1560
	CCTTTACAAA	GAAAGAGAG	AAAGGAAGTC	CGTATGGATC	AGCAGAGGCT	CAGAAAAACG	1620
	ACTGTTGGAA	GCAGATTAAA	TATCCCTTTG	CCAGACATCA	GTCACTGAG	TTTACCATCA	1680
	GCTATGATAA	TGAGAAAGG	ATGACACAAA	AGTTAGATCT	CATCACAAGT	GATATGGCAG	1740
20	GTTAACTCCG	TTGACTGCCA	AAATAGCATC	CCCAACGTGC	AGCCCTCCGC	ATCTATCAGC	1800
	AGGTGTGCCC	GGATGGATCT	CAGAGATGAG	GACTGGAAAC	CCATGTTCTT	TCCCAACCTA	1860
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	AGAGATAAAA	TATTTTCTTA	AAAATATATT	TCATTAAACA	CCTATGCTGT	CTCTATAAAA	1980
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Seq ID NO: C137 DNA Sequence
Nucleic Acid Accession #: E08 sequence
Coding sequence: 1..1761

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	AAGCTGGCGC	CCAGCGGGGT	CATGGTGCC	GGCGCGCGCG	GCGCGCGCGC	ACTGGCGCGG	180
35	GCTGCCGGGC	GGGGCTCTCT	GGCTTTGCTG	CTGCGGCTCT	CCGCCCCGCT	CCGGCTGCAG	240
	GCGGAGGAGC	TGGGTGATGG	CTGTGGACAC	CTAGTGACTT	ATCAGGATAG	TGGCACAATG	300
	ACATCTAAGA	ATPATCCCGG	GACCTACCCC	AATCACACTG	TTTGCGAAAA	GACAAATTAC	360
	GTACCAAGAG	GGAAAGAGCT	GATTCCTGAG	TTGGGAGATT	TGGATATCGA	ATCCGAGACC	420
	TGTGCTTCTG	ACTATCTTCT	CTTCACGAGC	TCTTCAGATC	AAATATGGTCC	ATACTGTGGA	480
40	AGTATGACTG	TTCCCAAGA	ACTCTTGTG	AACACAAGTG	AGTAACCGT	CCGCTTTGAG	540
	AGTGGATCCC	ACATTTCTGG	CCGGGGTTT	TTGCTGACCT	ATGCGAGCAG	CGACCATCCA	600
	GATTTAATAA	CATGTTTGGG	ACGAGCTAGC	CATTATTGGA	AGACAGAATA	CAGCAAAATC	660
	TGCCCCAGCT	GTGTGTAGAG	CGTAGCAGGA	GACATTTCTG	GGAAATATGGT	AGATGGATAT	720
	AGAGATACCT	CTTTATTTTG	CAAAGCTGCC	ATCCATGCAG	GAATAATTGC	TGATGAACCT	780
45	GCTGCCAGAG	TCAGTGTGCT	TCAGCGCAAA	GGGATCAGTC	GATATGAAGG	GATTCTGGCC	840
	AATGGTGTTC	TTTCGAGGGA	TGGTTCCTCT	TCAGACAAGC	GATTTCTGTT	TACCTCCAA	900
	GGTTCACAGA	GATCTTTGAG	TTTGAACCT	GACGGGCAAA	TCAGAGCTTC	TTCTCATGG	960
	CAGTCGGTCA	ATGAGAGTGG	AGACCAAGTT	CACTGGTCTC	CTGGCCAGCC	CCGACTTCAG	1020
50	GACCAAGGCT	CATGATGGGC	TTGCGGCGAC	AGTAGCAACA	ACCACAAACC	ACGAGAGTGG	1080
	CTGGAGATCG	ATTGCGGGGA	GAAGAAAGAA	ATAACAGGAA	TTAGGACCAC	AGGATCTACA	1140
	CAGTCGAAGT	TCAACTTTTA	TGTTAAGAGT	TTTGTATGGA	ACTTCAAAAA	CAATAATTCT	1200
	AAGTCGAAGA	CCATATAAAG	AATTGTGAAT	AATGAAGAAA	AGGTGTTTCA	GGGTAACTCT	1260
	AACCTTCGGG	ACCCAGTGCA	AAACAATTTT	ATCCCTCCCA	TGCTGGCCAG	ATATGTGCGG	1320
55	GTGTCTCCCT	AGACATGGCA	CCAGAGGATA	GCCTTGAAGG	TGGAGCTCAT	TGGTTGCCAG	1380
	ATTACACAA	GTAATGATTC	ATTGGTGTGG	CGCAAGACAA	GTCAAGGCAC	CAGTGTTTCA	1440
	ACTAAGAAAG	AAGATGAGAC	AATCACAAGG	CCCATCCCTT	CGGAAGAAAC	ATCCACAGGA	1500
	ATAAACATA	CACGCGTGGC	TATTCATTTG	GTGCTCCTTG	TTGTCTCTGT	GTTTGTCTGA	1560
	ATGGGGATCT	TTGCAGCCTT	TAGAAAGAG	AAGAAGAAAG	GAAGTCCGTA	TGGATCAGCA	1620
60	GAGGCTCAGA	AACGACACTG	TTGGAAGCAG	ATTAAATATC	CCCTTGCCAG	ACATCAGTCA	1680
	GCTGAGTTTA	CCATCAGCTA	TGATAATGAG	AAGGAGATGA	CACAAAGATT	AGATCTCATC	1740
	ACAAGTGATA	TGGCAGGTTA	A				1761

Seq ID NO: C138 DNA Sequence
Nucleic Acid Accession #: FGENESH predicted
Coding sequence: 1..2310

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	TATCAGGATA	GTGGCACAAT	GACATCTAAG	AATTAATCCG	GGACCTACCC	CAATCACACT	180
	GTTTGGCGAA	AGACAAATTAC	AGTACCAAG	GGGAAAAGAC	TGATTTCTGAG	GTGGGAGAT	240
	TTGGATATCG	AATCCGAGAC	CTGTGCTTCT	GACTATCTTC	TCTTCACAG	CTCTTCAGAT	300
75	CAATATGGA	TGCAAGAGGA	GGAGGAGACA	GAAGTGCTTT	GTCTTTCACT	GGCTGGCGCT	360
	CAGAGAGTGG	ACATTCCTGT	GCAGCTGTTG	CCAGCTTCC	TGGAAGGGTG	GAAGGTCAT	420
	CGTAGTGCAA	GAGGTCCATA	CTGTGGAGT	ATGACTGTTC	CCAAAGAACT	CTTGTGAAC	480
	ACAAGTGAAG	TAACTGCTCG	CTTTGAGAGT	GGATCCACCA	TTTCTGGCCG	GGTPTTTTGG	540
	CTGACCTATG	CGAGCAGCGA	CCATCCAGAT	TTAATAACAT	GTTTGGAAAG	AGCTAGCCAT	600
80	TATTTGAAGA	CAGATATCAG	CAAACTCTGC	CCAGCTGTTT	GTAGAGACGT	AGCAGGAGAC	660
	ATTTCTGGGA	ATATGTTAGA	TGGATATAGA	GATACCTCTT	TATTTGTCAA	AGCTGCCATC	720
	CATGCAAGAA	TAATTGCTGA	TGAACCTAGT	GGCCAGATCA	GTGTGCTTCA	GCGCAAGAGG	780
	ATCAGTCGAT	ATGAAGGGAT	TCGTGCCAAT	GGTGTCTTCT	CGAGGAGTGG	TTCCCTGTCA	840
	GACAGCGAT	TTCTGTTTAC	CTCCAATGGT	TGCAGCAGAT	CCTTGAGTTT	TGAACCTGAC	900
	GGGCAATCA	GAGCTTCTTC	CTCATGGCAG	TGGGCAATG	AGAGTGGAGA	CCAAGTTCAC	960

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 ACAGGAATTA GGACACACAG ATCTACACAG TCGAACTTCA ACTTTTATGT TAAGAGTTTT 1140
 GTGATGAAGT TCAAAAACAA TAATTCTAAG TGGAAAGCCT ATAAAGGAAT TGTGAATAAT 1200
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 CCTCCCATCG TGCCACAGATA TGTGCGGGTT GTCCCCCAGA CATGGCACCA GAGGATAGCC 1320
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 ATCCCTCGG AAGAAACATC CACAGATGCC ATGCCAGTGC AGATTGTCCG AGACCATACC 1500
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 GGCACCGGGA CAGTCAAGAG GAAGGGCTCC ACCTTCCGGC CCATGGACAC GATGCCBAG 1860
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 CACAGATACG CAGTCCCTT GCGCGCCCGC GAGCCGAGT ACGCCACGCC CATCGTGGAG 1980
 CCGCAGGTGC TGCGCGGCCA CAGCTTCTCT GCGCAGAGCG GCTACCGCGT CCCAGGGCCC 2040
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 GCCCAGGACG GAGACTATCA AAGGCCACAC AGCGCACAGC CTGCGGACAG GGGCTACGAC 2160
 CGGCCCAAAG CTGTACAGCG CCTCGCCACC GAAAGCGGCG ACCCTGACTC TCAGAGGCC 2220
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 AACAGACGG CATGACGTC CCTTTGTGA 2310

25 Seq ID NO: C139 DNA Sequence
 Nucleic Acid Accession #: NM_004616.2
 Coding sequence: 180..893

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 TGGCAGGTGT GAGTGCCTGT ATAAATATT CTATGTTTAC CTTCAACTTC TTGTTCTGGC 240
 35 TATGTGGTAT CTGATCTCTA GCATTAGCAA TATGGGTACG AGTAAGCAAT GACTCTCAAG 300
 CAATTTTGGC TTCTGAAGAT GTAGGCTCTA GCTCTTACGT TGCTGTGGAC ATATTGATTG 360
 CTGTAGGTGC CATCATCATG ATTCTGGGCT TCCTGGGATG CTGCGGTGCT ATAAAGGAAA 420
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 40 TCTATGAAAA CACAAAGCCT TTGAGCGCCA CAGGGGAAAG TGAANAACAA TTCCAGGAAG 600
 CCATAATGTG GTTTCAGAAA GAGTTTAAAT GCTGCGGTTT GGTCAATGGA GCTGCTGATT 660
 GGGGAAATAA TTTTCAACAC TATCCTGAAT TATGTGCTTG TCTAGATAAG CAGAGACCAT 720
 GCCAAAGCTA TAATGGAATA CAAGTTTACA AAGAGACCTG TATTTCTTTC ATAAAGACT 780
 TCTTGGCRAA AAATTTGATG ATAGTTATTG GAATATCATT TGGACTTGGA GTTATTGAGA 840
 45 TACTGGGTTT GGTGTTTTCT ATGGTCTGT ATTGCCAGAT CGGGAACAAA TGAATCTGTG 900
 GATGCATCAA CCTATCGTCA GTCAAAACCC TTTAAATATG TGCTTTGGCT TTGTAAATTT 960
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 50 AAAAAAATA AAAAAAATA 1159

55 Seq ID NO: C140 DNA Sequence
 Nucleic Acid Accession #: NM_004617.2
 Coding sequence: 232..840

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 GCTAACATCC TGTATTTTTT TCTTGGAGGA AAAGTGAATG ATGACAAAGA CCACCTTCC 360
 65 CAAGAGATCT GGTTTTTTCG AGGAATATTA GGAAGCGGTG TCTTGATGAT CTTCCCTGCG 420
 CTGCTGTCTT TGGGCTTGAA GAACAATGAC TCTGTGGGTT GCTGCGGCAA CGAGGCGTGT 480
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 ACGTCCGAGA TGAAGTGTCT AGACTCTACA GCATGAGGAC TACAATTTCT TTTCTAATAA 900
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 75 AGGCAATAT TCTTCTTCT CAACAGCTT TGCTCGAGTT AGAATTTTGT TATTTTCAA 1020
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 TGGAGTTTTT ACATAAATCA AAGGAAGAAA GCACATTTAA AATGAGAAAC TAAGACCAAT 1260
 80 TTTCTGTTTT AAGAGGAAA AGAATGATT ATGTATCTTA AGTATTGTTA TTTGTTGCT 1320
 TTTTGTGCTG CTTGCTTGA GTTGTGTG ACTGATCTTT TGAGGCTGTC ATCATGGCTA 1380
 GGGTCTTTTT ATGTATGTTA AATTAAACC TGAATTCAGA GGTAACTG 1428

Seq ID NO: C141 DNA Sequence
 Nucleic Acid Accession #: NM_002381.2

Coding sequence: 64..1524

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GAGACCCGAG GTCCCGGGGG CAGCCCTGGA CGCGCCCTCT CTCTGGCGGC TCCCGACGGC 240
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10 AGACCCCTGG ACCTGGTGT TATCATGTAT AGTTCTCGTA GCGTAAGGCC CCTGGAATTG 360
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ACCGGGGTGG CAGTGGTGAA CTATGCTAGC ACTGTGAAGA TCGAGTTCCA ACTCCAGGCC 480
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15 ACCATGTGAG GCCTAGCCAT CCAGACAGCA ATGGAAGGAG CCTTCACAGT GGAGGCAGGG 600
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CAGGACCAGG TGAATGAAGT GCGCGCTCGG GCCCAAGCAT CTGGTATTGA GCTCTATGCT 720
GTGGGGGTGG ACCTGGCAGA CATGGCTGCC CTCAGATGA TGGCCAGTGA GCCCTTAGAG 780
GAGCATGTTT TCTACGTGGA GAACATGGG GTCATTGAGA AACTTCTCTC TAGATTCCAG 840
20 GAAACCTTCT GTGCGCTGGA CCCCTGTGTG CTTGGACAC ACCAGTGCCA GCACTCTGCG 900
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25 CAGCACATTT GTGTGAATGA CAGAACAGGG TCCCATCATT GTGAATGCTA TGAGGGCTAC 1200
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TAAATTTGCA FTATCTGAT TATGCTTGA ATATTACTGG ATAAATGTGA TGAAGATCTT 1680
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35 CTTTGTGTGC TCTAAGTTAT GACTGTGAAA TGATTGGTAG GAAATAGAAT GAAAAGTTTA 1800
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40 TTGAAGATGT GATCAATAGA TTGTAATACA CATATCTAAA AATAGTTAAC ACAGATCAAG 2100
TGAACATTAC ATTGCCATTT TTAATTCATT CTGGTCTTTG AAAGAAATGT ACTACTAAG 2160
AGCATAGTTT GTGAATTTAG GGTGTTAAC TTTTACCATA GTACAAAAAT CCCAAATTC 2220
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45 AGTGTCTGGA TTACAGGCTT GAAAGTCTAA CTTTCTTTTA CTATATATT TGATACATAT 2400
AATTCCTTTG GCTTTGAAAC TTGCAACTTT GAGAACAAAA CAGTCTTTTA AATTTTGCAC 2460
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TAAAAAATAA AAAAAAATAA 2599

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Seq ID NO: C142 DNA Sequence
Nucleic Acid Accession #: NM_016639.1
Coding sequence: 40..429

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GAGCAAGCGC CAGCAGCTGC CCGCTGCTCC CGCGCGAGCT CCGGAGCGCG GGACCTGGAG 180
60 AAGTGCATGG ACTGCGCGTC TTGCAAGGCG CGACCGCACA GCGACTTCTG CCTGGGCTGC 240
GCTGCAGCAC CTCTGCCCC CTTCGGGCTG CTTTGGCCCA TCCTTGGGGG CGCTCTGAGC 300
CTGACCTTCG TGTCTGGGCT GCTTTCTGCG TTTTGGTCTT GGAGACGATG CCGCAGGAGA 360
GAGAAGTTCA CACCCCCCAT AGAGGAGACC GCGGAGAGGG GCTGCCGAGC TGTGGCGCTG 420
ATCCAGTGAC AATGTGCCCC CTGCCAGCGG GGGCTCGCCC ACTCATCATT CATTCATCCA 480
65 TTCTAGAGCC AGTCTCTGCC TCCAGACGCG GCGGGAGGCC AAGCTCTCTC AACCACAAGG 540
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CCTTCTCTAG GACTCTGGGG CAGGCTGAC TTGGGGGCGA GACTTGACAC TAGGCCCAAC 780
70 TCACCTAGAT GTCTGAAAT TCCACCACGG GGGTCACCTT GCGGGGTTAG GGACCTATTT 840
TTAACAATAG GGGCTGGGCC ACTAGGAGGG CTGGCCCTAA GATACAGACC CCCCCAATC 900
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Seq ID NO: C143 DNA Sequence
Nucleic Acid Accession #: NM_001819
Coding sequence: 113..2146

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AACCTGCTCT CTAGCCTTCC TGGGAGCGGT GGGGCTGGCG GCTGTCAATT CCATGCCAGT 180
GGATAACAGG AACCACAATG AAGGAATGCT GACTCGCTGC ATCATTGAGG TCCTCTCAAA 240

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5 TGCCCTGTGCG AAGTCCAGCG CTCACCCCAT CACCCCTGAG TGCCGCCAAG TCCTGAAGAC 300
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 AAGATTGTTA AGAGACCCAG CTGATGCCTC GGAAGCCAC GATCCTCCA GCAGGGGAGA 420
 GCGAGGAGCC CCAGGGGAGG AGGACATCCA AGCCCAACA AAGGCAGACA CAGAGAAATG 480
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 CTCGACAGC CAAGTCTCTG AAGAAGTGAA GACACGCCAT TCTGAGAAGA GCCAGAGAGA 600
 GGATGAGGAG GAGGAGGAGG GACAGAACTA TCAAAAAGGG GAGCGAGGGG AAGATAGCAG 660
 TGAAGAGAAA CACCTTGAAG AGCCAGGAGA GACACAAAAC GCTTTCTCA ATGAAAGAAA 720
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 GCATTTCTCG GAGAAGACAC ATAGCCGAGA GAAGAGTAGC CAGGAGAGTG GAGAGGAGGC 840
 AGGGAGCCAG GAGAAATCAC CCCAGGAGTC TAAAGGCCAA CCCGAGGCC AGGAAGAATC 900
 TGAGGAAGGT GAGGACAGAT CCACCTCTGA GGTGGACAAA CGACGACGA GGGCCAGACA 960
 CCACCAAGCG AGGAGCAGGC CCGACAGGTC CTCTCAAGGA GGGAGTCTTC CCTCTGAGGA 1020
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 ACCATTTATA TACCCAGGG CAGAAAGTAG AACTTACTAT TCATTAAATG TTTGACACAA 2280
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Seq ID NO: C144 DNA Sequence
 Nucleic Acid Accession #: XM_093082.1
 Coding sequence: 93..1988

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 55 CAGGAAGACT TGAGGAGTGG GAGGAGGTTT TGGGGTTGGG GGTGCTTGT CAGCCCGGTG 600
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 TGCCTAATTC TCTCTGTCTG GTTAGTGTGG TGCAAGTGAC CATCCAGAC GGTTCGTGA 840
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 AGGCATAG 1988

Seq ID NO: C145 DNA Sequence
 Nucleic Acid Accession #: FGENESH predicted
 Coding sequence: 1..1242

1 11 21 31 41 51

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Seq ID NO: C146 DNA Sequence

Nucleic Acid Accession #: NM_003020.1

Coding sequence: 29..664

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CGCTCCTCGG	GCTGCCCTTC	GTTTGACAAT	GGTCTCCAGG	ATGGTCTCTA	CCATGCTATC	60
TGGGCTACTG	TTTTGGCTGG	CATCTGGATG	GACTCCAGCA	TTTGCTTACA	GCCCCCGBAC	120
CCCTGACCGG	GTCTCAGAA	CAGATATCCA	GAGGCTGCTT	CATGGTGTTA	TGGAGCAATT	180
GGGCAATTGCC	AGGCCCCGAG	TGGAATATCC	AGCTCACCAG	GCCATGAATC	TTGTGGGCCC	240
CCAGAGCAAT	GAAGGTGGAG	CTCATGAAGG	ACTTCAGCAT	TTGGGTCCCT	TTGGCAACAT	300
CCCAACATC	GTGGCAGAGT	TGACTGGAGA	CAACATTCCT	AAGGACTTTA	GTGAGGATCA	360
GGGTACCCA	GACCCCTCAA	ATCCCTGTCC	TGTTGGAAAA	ACAGATGATG	GATGTCTAGA	420
AAACACCCCT	GACACTGCG	AGTTCACTCG	AGAGTTCAG	TTGCACACAG	ATCTCTTTGA	480
TCCGGAACAT	GACTATCCAG	GCTTGGGCAA	GTGGAACAG	AAACTCCTTT	ACGAGAAGAT	540
GAAGGGAGGA	GAGAGACGAA	AGCGGAGGAG	TGTCAATCCA	TATCTACRAG	GACAGAGACT	600
GGATAATGTT	GTTCGAAAGA	AGTCTGTCCC	CCATTTTTC	GATGAGGATA	AGGATCCAGA	660
GTAAGAGAAA	GATGCTAGAC	GAAAACCCAC	ATTACCTGTT	AGGCCCTCAG	ATGGCTTAGT	720
TGCACGTGTA	AATGAGATCC	CTGTGAATGA	CAGCATGTTT	CTTACATAGA	TAATTATGGA	780
TACAAAGCAG	CTGTATGTAG	ATAGTGTATT	GTCCTTCAAC	CGATGATTC	GCTTTTGTCT	840
AAATTGAAT	AAGAGCTTTT	TTGTTTCTTG	GGTTTTTAAA	ATGTGAATCT	GCAATGATCA	900
TAAAAATTAA	AATGTGAATG	TCAACAATAA	AAAGCAAGAC	TATGAAGGC	TCAGATTTCT	960
TGCACTTTAA	AATGGTGTCT	GAGGTTGTAC	TATTTTGGCC	AAGTCTGTAG	AAAGCTGTCA	1020
TTTGATTTTG	ATTATGTAGT	TCAATCCAGC	CTTGGGCATT	GTTATACACC	AGTAAAGAGA	1080
GCTGTACTCA	AGAGGAGGAG	CTGACACATT	TCACTTGGCT	GCGTCTTAAT	AAACATGAAT	1140
GCAAGCAATTG	GC					1152

Seq ID NO: C147 DNA Sequence

Nucleic Acid Accession #: NM_024021.2

Coding sequence: 144..806

55
 60
 65
 70
 75
 80

1	11	21	31	41	51	
AACATTCCTG	CAATATGTTT	CAATATATGC	AGATGTCTCG	ATATAGGAAT	GAAATTACGT	60
CTTTGGAACA	ACTTAAATAA	GTCAAAATATA	CTTGGAGCTT	TAAAAATTAA	AAGGAGAGAG	120
ATTGAGGAC	CTTTCTGCT	GCCATGACAA	CCATGCAAGG	AATGGAACAG	GCCATGCCAG	180
GGGCTGGCCC	TGGTGTGCCC	CAGCTGGGAA	ACATGCGCTG	CATACATTCA	CATCTGTGGA	240
AAGGATTGCA	AGAGAAGTTC	TTGAAGGGAG	AACCCAAAGT	CCTTGGGGTT	GTGCAAGTTC	300
TGACTGCCCT	GATGAGCCTT	AGCATGGGAA	TAACAATGAT	GTGTATGGCA	TCTAATACTT	360
ATGGAAGTAA	CCCTATTTC	GTGTATATCG	GGTACACAAT	TTGGGGGTCA	GTAATGTTTA	420
TTATTTCAGG	ATCCTGTGCA	ATTGCAGCAG	GAATTAGAAC	TACAAAAGGC	CTGGTCCGAG	480
GTAGTCTAGG	AATGAATATC	ACCAGCTCTG	TACTGGCTGC	ATCAGGGATC	TTAATCAACA	540
CATTTAGCTT	GGGTTTAT	TCATTCCATC	ACCCCTACAG	TAACACTAT	GGCAACTCAA	600
ATAATTGTCA	TGGGACTATG	TCCATCTTAA	TGGGTCTGGA	TGGCATGGTG	CTCCTCTTAA	660
GTGTGCTGGA	ATTCTGCTAT	GCTGTGTCCC	TCCTGCTCTT	TGGATGTAAA	GTGCTCTGTT	720
GTACCCCTCG	TGGGTTGTG	TTAATTCTGC	CATCAGATT	TCACATGGCA	GAAACAGCAT	780
CTCCACACCC	ACTTAATGAG	GTTTGAAGCC	ACCAAAAGAT	CAACAGACAA	ATGCTCCAGA	840
AATCTATGCT	CAGTGTGACA	CAAGAGCCTC	ACATGAGAAA	TTACCAATAT	CCAACCTTGA	900
TACTGATAGA	CTGTGTGATA	TTATTATTAT	ATGTAATCCA	ATTATGAAT	GTGTGTGTAT	960
AGAGAGATAA	TAAATTCAAA	ATTATGTTCT	CATTTTTC	CCTGGAATCT	AATACTCAT	1020
TTCACTGGCT	CTTTATCGAG	AGTACTAGAA	GTTAAATTAA	TAAATATGTC	ATTTAATGAG	1080
GCAACAGCAC	TTGAAAGTTT	TTCAATTCATC	ATAAGAATCT	TATATAAAGG	CATTACATTG	1140
GCAAAATAGG	TTTGGAGACA	GAAGAGCAAA	AAAAAGATAT	TGTTAAATG	AGGCTCCCAT	1200
GCAAAACACA	TACTTCCCTC	CCATTATTTT	AACCTTTTTC	TTCTCTTACC	TATGGGGACC	1260
AAAGTCTTTC	TTCCTTCAGG	AAGTGGAGAT	GCAATGGCAT	CTCCCTTCC	CTTTTCTCTT	1320
CTCCGCTTTC	TCCTTCCCCA	TAGAAAGTAC	CTTGAAGTAG	CACAGTCCGT	CCTTGCATGT	1380
GCACGAGCTA	TCATTTGAGT	AAAAGTATAC	ATGGAGTAAA	AATCATATTA	AGCATCAGAT	1440
TCACCTTATA	TTTCTATATT	CATCTTCTTC	CTTCCCTTTC	TCCCACTCTC	TACTGGGCAT	1500
AATTATATCT	TAAATCAATA	TGGAAATGTG	CAACATATGG	TATTTGTAA	ATACGTTTGT	1560
TTTTATTGCA	GAGCAAAAT	AAATCAATTT	AGAAACATA	AAAAAAA	AAAAAAA	1619

Seq ID NO: C148 DNA Sequence
Nucleic Acid Accession #: NM_002091.1
Coding sequence: 56..502

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5      1      11      21      31      41      51
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      |      |      |      |      |      |
10     AGTCTCTGCT CTCTCCAGCC TCTCCGGGCG GCTCCAAGGG CTTCCTGTGG GGACCATGGG 60
      CGGCAGTGAAG CTCCTCGCTGG TCCTGCTGGC GCTGGTCTCT TGCCTAGGCG CCCGGGGGCG 120
      AGCGGTCCCG CTGCTCTGCG GCGGAGGGAC CGTGTGACG AAGATGTACC CGCGGGCAA 180
      CCACTGGGCG GTGGGGCACT TAATGGGGAA AAGAGACACA GGGGAGTCTT CTCTGTITTC 240
      TGAGAGAGGG AGCCTGAAGC AGCAGCTGAG AGAGTACATC AGGTGGGAAG AAGCTGCAAG 300
      GAATTTGCTG GGTCTCATAG AAGCAAAAGG AACAGAAAC CACCAGCCAC CTCACCCCAA 360
      GGCTTGGGCG AATCAGCAGC CTCTGTGGGA TTCAGAGGAT AGCAGCAACT TCAAAGATGT 420
      AGGTTCAAAA GGCAGAGTTG GTAGACTCTC TGCTCCAGGT TCTCAACGTG AAGGAAGGAA 480
      CCCCCAGCTG AACCAGCAAT GATAATGATG GCCTCTCTCA AAAGAGAAAA ACAAAACCCC 540
      TAAGAGACTG AGTTCTGCAA GCATCAGTTC TACGGATCAT CAACAAGATT TCCTTGTGCA 600
      AAATATTGTA TATTCTGTGA TCTTTCATCC TTGACTAAAT TCGTGATTIT CRAAGCAGAT 660
      CTCTGTGTTT AAACITGTTT GCTGTGAACA ATTGTGAAA AGAGTCTTCC AATTATATGCT 720
      TTTTATATTC TAGGCTACCT GTTGGTTAGA TTCAAGGCCG CGAGCTGTTA CCATTACAAA 780
      TAAAAGCTTA AACACAT 797
  
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Seq ID NO: C149 DNA Sequence
Nucleic Acid Accession #: NM_012253.1
Coding sequence: 203..1045

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25     1      11      21      31      41      51
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      |      |      |      |      |      |
30     GATTGCTCT GCCAGCAGCT GTCGGTGCGG CGCTCGACAC CGAGTCTTAG CTAGGCGCTC 60
      ACAGAAATAG CGCTCCCTCC CTCCTCCCTC TCTGTCCCTC GCCTCTCGCT CACCCCGGCC 120
      CACTCCAGCG GGCACCTTGA GGGATTCCCT CTCTGGGGCG CTCTGCAGCA GCACAGCCGG 180
      CCTCATTCGG GGCACCTGCA GTATGGATCT CCAAGGAAGA GGGGTCCCA GCATCGACAG 240
      ACTTCGAGTT CTCTGTATGT TGTTCATAC AATGGCTCAA ATCATGGCAG AACAGAAAGT 300
      GGAATATCTC TCAGGCTCTT CCACTAACCC TAAAAAAGAT ATATTGTGG TCGGGGAAAA 360
      TGGGACGAGG TGTCTCATGG CAGAGTTTGC AGCCAAATTT ATTGTACCTT ATGATGTGTG 420
      GGCACGACAC TACGTAGATC TGATCACAGA ACAGGCCBAT ATGCAATTGA CCGGGGGAGC 480
      TGAGGTGAAG GGCCTGCTGT GCCACAGCCA GTCCGAGCTG CAAGTGTCTT GGGTGGATCG 540
      CGCATATGCA CTCAAAATGC TCTTTGTAAA GGAAGGCCAC AACATGTCCA AGGGACCTGA 600
      GGCACCTTGG AGGCTGAGCA AAGTGCAGTT TGTCTACGAC TCCTCGGAGA AAACCCACTT 660
      CAAGACGCGA GTCAGTGTCT GGAAGCACAC AGCCAACTCG CACCACCTCT CTGCTTGGT 720
      CACCCCGGCT GGAAGTCTCT ATGAGTGTCA AGCTCAACAA ACCATTTCAC TGGCTCTTAG 780
      TGATCCGCGG AAGAAGGTCA CCGTATCTCT GTCTGCGGTC CACATCCAC CTTTGTACAT 840
      TATCTCGATG TTTGTCTTCA GTGAAGAGCA TAAATGCCCA GTGGATGAGC GGGAGCAACT 900
      GGAAGAAACC TTGCCCTTGA TTTTGGGGCT CATCTTGGGC CTGCTCATCA TGGTAACACT 960
      CGGATTTTAC CAGGTCCACC ACAAAATGAC TGCCAAACAG GTGCAGATCC CTCGGGACAG 1020
      ATCCAGTATC AAGCACATGG GCTAGAGGCC GTTAGGCAGG CACCCCTAT TCCTGCTCCC 1080
      CCACTGGATC CAGGTAGAAC AACAAAGCA CTTTTCATC TTGTACAGA GATACACCAA 1140
      CATAGCTACA ATCAAAACAG CCTGGGTATC TGAGGCTTGC TTGGCTTGTG TCCATGCTTA 1200
      AACCCACGGA AGGGGGAGAC TCTTTCGGAT TTGTAGGGTG AAATGGCAAT TATTCTCTCC 1260
      ATGCTGGGGA GGAAGGGAGG AGGGTCTCAG ACAGCTTTCG TGCTCATGGT GGCCTGGCTT 1320
      TGACTCTCCA AAGAGCAATA AATGCCACTT GGAGCTGTAT CTGGCCCAA AGTTTAGGGA 1380
      TTGAAACAT GCTTCTTTGA GGAGGAACCC CCTTTAGGTT CAGAAGATA TGGGTGCTT 1440
      TGCTCCCTTG GACACAGCTG GCTTATCTTA TACAGTTGTC AATGCACACA GAATACAACC 1500
      TCATGCTCCC TGACAGCAAG CCGCTGAAAG TGATTCAATG TCTGCGCAG CATTCTGCAT 1560
      GTTAGTATG TGTCTTGGGA ATGTTTCACT GCTACCCGCA TCCAGCGACT GCAGCACCAG 1620
      AAAAGAGATA ATGTAATCAT GCAGATTGT TTGACTTCT TCCTGTGCCA GGTCCAAGTC 1680
      GGGGAGCTG AAGATCAAT CTGTGTGAGT CTGTTTTTCA AATGAATAA AAACACACTA 1740
      TTCTCTGCG 1749
  
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Seq ID NO: C150 DNA Sequence
Nucleic Acid Accession #: NM_003226.1
Coding sequence: 2..226

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65     1      11      21      31      41      51
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      |      |      |      |      |      |
70     GATGCTGGGG CTGGTCTTGG CCTTGCCTGT CTCAGCTCT GCTGAGGAGT ACCTGGGCCT 60
      GTCTGCAAAC CAGTGTGCGG TGCCGGCCAA GGACAGGGTG GACTGGGGCT ACCCCCATGT 120
      CACCCCAAG GAGTGCAACA ACCGGGGCTG CTGCTTGAAC TCCAGGATCC CTGGAGTGCC 180
      TTGGTGTTC AAGCCCTTGA CTAGGAAGAC AGAATGCACC TTCTGAGGCA CTCCAGCTG 240
      CCGCTGGGAT GCAGGCTGAG CACCCCTTGC CGGCTGTGAT TGCTGCCAG CACTGTTCAT 300
      CTCAGTTTTT CTGTCCCTTT GCTCCCGGCA AGCTTCTGCT TGAAGTTCA TATCTGGAGC 360
      CTGATGTCTT AACGAATAAA GGTCCCATGC TCCACCCG 398
  
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Seq ID NO: C151 DNA Sequence
Nucleic Acid Accession #: NM_002993.1
Coding sequence: 64..408

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80     1      11      21      31      41      51
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      |      |      |      |      |      |
      GGCACGAGCC AGTCTCCGGG CCTCCACCCA GCTCAGGAAC CCGCAACCC TCTCTGACC 60
      ACTATGAGCC TCCCGTCCAG CGCGCGGCC CGTGTCCCG GTCCCTCGGG CTCCTTGTGC 120
      GCGCTGCTCG CGCTGCTGCT CCTGCTGAC CGCGCGGGG CCTCGCCAG CGCTGTGCT 180
      GTCTCTGCTG TGTGACAGA GCTGCTTGC ACTGTGTTAC CGGTACGCT GAGAGTAAAC 240
  
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5
 10
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 20

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CCCCAAACGA TTGGTAAACT GCAGGTGTTT CCCGAGGCC CGCAGTGCTC CAAGGTGGAA 300
GTGGTAGCCT CCGTGAAGAA CCGGAAGCAA GTTGTCTGG ACCCGGAAGC CCCTTTTCTA 360
AAGAAAGTCA TCCAGAAAT TTTGGACAGT GBAACAAGA AAACTGAGT AACAAAAAG 420
ACCATGCATC ATAAAAATGC CCAGTCTTCA GCGGAGCAGT TTCTGAGAGA TCCCTGGACC 480
CAGTAAGAAAT AAGAAAGGAG GGTGGTTTTT TTTCCATTTT CTACATGGAT TCCCTACTTT 540
GAAGAGTGTG GGGGAAAGCC TACGCTTCTC CCTGAAGTTT ACAGCTCAGC TAATGAAGTA 600
CTAATATAGT ATTTCCACTA TTTACTGTGA TTTTACCTGA TAAGTTATTG AACCCITTGG 660
CAATTGACCA TATGTGTGAGC AAAGAATCAC TGGTTATTAG TCTTTCAATG AATATTGAAT 720
TGAAGATAAC TATTTGATTTT CTATCATACA TTCTTAAAG TCTTACCGAA AAGGCTGTGG 780
ATTCGTATG GAATAAATGT TTTATTAGTG TGCTGTGAG GGAGGTATCC TGTGTCTCTT 840
ACTCACTCTT CTATAAAAT AGGAATATTT TTAGTTCTGT TTTCTTGGGG AATATGTTAC 900
TCTTTACCTT AGGATGCTAT TTAAGTTGTA CTGTATTAGA ACACTGGGTG TGTCATACCG 960
TTACTGTGTC AGAATATATT TCCTTATTCA GAATTTCTAA AAATTTAAGT TCTGTAAGGG 1020
CTAATATATT CTCTTCTAT GGTTTTAGAT GTTTGATGTC TTCTTAGTAT GGCATAATGT 1080
CAGATTATC TCATTAAACT TTGATTTTGT ATGCTATTTT TTTACTATAG GATGACTATA 1140
ATTCGTGCTA CTAATAATAC ACTTTAGATA GATGAAGAAG CCCAAACACA GATAAATTCC 1200
TGATTGCTAA TTTACATAGA AATGTATTTT CTTGGTTTTT TAAATAAAG CAAATTAAC 1260
AATGATCTGT GCTCTGCAAA GTTTTGAAAA TATATTGAA CAATTTGAAT ATAAATTCAT 1320
CAATTAGTCC TCAAAATATA TACAGCATTG CTAAGATTTT CAGATATCTA TTGTGGATCT 1380
TTTAAAGGTT TGAACCATTT TGTATGAGG AATTATACAT GTATCAGATT CACTATATTA 1440
AAATGCACT TTATTTT TCTGTGTC ATGTTGTTT TTGTTACTTG TATTGTCAAT 1500
TGGAGAAACA ATAAAGATT TCTAAACCAA AAAAAA AAAA 1547
  
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25
 30

Seq ID NO: C152 DNA Sequence
 Nucleic Acid Accession #: NM_005242.2
 Coding sequence: 148..1341

35
 40
 45
 50
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1 11 21 31 41 51
| | | | |
CGGCCGCCCC TGGGGAGGCG CGCAGCAGAG GCTCGATTCC GGGGCAGGTG AGAGGCTGAC 60
TTCTCTCGG TGCTTCAGT GGAGCTCTGA GTTTCGAATC GGTGGCGGGG GATTCCCGGC 120
GCGCCCGGGG TCGGGGCTTC CAGGAGGATG CCGAGCCCCA GCGGGGCGTG GCTGCTGGGG 180
GCGCCCATCC TGCTAGCAGC CTCTCTCTCC TGCAGTGGCA CCATCCCAAGG AACCAATAGA 240
TCCTCTAAAG GAAGAAGCCT TATTTGTAAG GTTGATGGCA CATCCCACT CACTGGAAAA 300
GGAGTTACAG TTGAACAGT CTTTCTGTG GATGAGTTT CTGCTCTGT CTTCACTGGA 360
AAACTGACCA CGTCTTCTCT TCCAATGTC TACACAATTG TGTGTTGGT GGGTTTGCCA 420
AGTAACGGCA TGGCCCTGTG GGTCTTTCTT TTCCGAACTA AGAAGAAGCA CCCTGCTGTG 480
ATTTACATGG CCAATCTGGC CTGCGCTGAC CTCTCTCTCT TCATCTGGTT CCCTTGAGG 540
ATTGCTATC ACATACATGC CAACAACCTG ATTTATGGGG AAGCTCTTTG TAATGTGCTT 600
ATTGCTTTT TCTATGGCAA CATGACTGT TCCATTCTCT TCATGACCTG CCTCAGTGTG 660
CAGAGTATT CGTCTTCTCT GAACCCCATG GGCACCTCCA GGAAGAGGGC AAACATTGCC 720
ATTGCTATC CCCTGGCAAT ATGGCTGCTG ATTTCTGCTG TCACCATCCC TTTGTATGTC 780
GTGAAGCAGA CCACTCTTCAT TCCGCCCCG AACATCACGA CCTGTCTAGA TGTGTTGCTT 840
GACAGCTCT TGGTGGGAGA CATGTTCAAT TACTTCTCT CTCTGGCCAT TGGGGTCTTT 900
CTGTTCCAG CTTTCTCTAC AGCCTCTGCC TATGTGCTGA TGATCAGAAAT GCTGCGATCT 960
TCTGCCATGG ATGAAACCTC AGAGAAGAAA AGGAAGAGGG CCATCAAACT CATGTGCTCT 1020
GTCTGTGCCA TGTACCTGAT CTGCTTCACT CCTAGTAACC TTCTGCTTGT GGTGCATTAT 1080
TTTCTGATTA AGAGCCAGGG CCAGAGCCAT GTCTATGCCC TGTACATTGT AGCCCTCTGCT 1140
CTCTCTACCC TTACAGCTG CATCGACCCC TTTGTCTATT ACTTTGTTTC ACATGATTTT 1200
AGGGATCATG CAAAGAACGC TCTCTTTTGC CGAAGTGTCC GCACGTGTAA GCAGATGCAA 1260
GTATCCCTCA CCTCAAGAA AACTCCAGG AATCCAGCT CTACTCTTTC AAGTTCAACC 1320
ACTGTTAAGA CTTCTTAATT AGTTTTCAG GTCTCTCAGT GGAATTGCA CAGTAGGATG 1380
TGGAACTGT TAAATGTTAT GAGGACGTGT CTGTTATTTT CTAATCAAAA AGGTCTCACC 1440
ACATACCACC G 1451
  
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60

Seq ID NO: C153 DNA Sequence
 Nucleic Acid Accession #: NM_003469.2
 Coding sequence: 92..1945

65
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 75
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1 11 21 31 41 51
| | | | |
GAAACGGCCC GAGAAGCTCG CCCGAGAAC GGGGAGGAAT ATGCTGTGGA GCTCCTCTGC 60
CATATAAACA AAAAGAGGAA ATCTTTCAA CATGGCTGAA GCAAAGACCC ACTGGCTTGG 120
AGCAGCCCTC TCTCTTATCC CTTTAATTTT CCTCATCTCT GGGGCTGAG CAGCTTCATT 180
TCAGAGAAAC CAGCTGCTTC AGAAGAACC AGACCTCAGG TTGGAATAATG TCCAAAAGTT 240
TCCCAGTCTT GAAATGATCA GGGCTTTGGA GTACATAGAA AACCTCCGAC AACAGCTCA 300
TAAGGAAGAA AGCAGCCAG ATTATAATCC CTACCAAGGT GTCTCTGTCC CCCCTCAGCA 360
AAAAGAAAT GGCATGAAA GCCACTTGCC CGAGAGGGAT TCACTGAGTG AAGAGACTG 420
GATGAGAATA ATACTCGAAG CTTTGAGACA GGCAGAAAAT GAGCTCAGT CTGCAOCAA 480
AGAAAAAAG CCCTATGCC TGAATTCAGA AAGAACTTT CCAATGGACA TGAGTATGA 540
TTATGAGACA CAGCTGATGC CAGAAAGAAA GCCTAAGCAC ATGCAATTCC CTCCTATGTA 600
TGAAAGAAAT TCAGGGATA ACCCCTTTAA ACGCACAAAT GAAATAGTGG AGGAACAATA 660
TACTCTCAA AGCCTTGCTA CATTTGAATC TGTCTTCCAA GAGCTGGGGA AACTGACAGG 720
ACCAACACAC CAGAAACGTG AGAGGATGGA TGAGGAGCAA AAACCTTATA CGGATGATGA 780
AGATGATATC TACAAGGCTA ATAACATTGC CTATGAAGAT GTGGTCCGGG GAGAAGACTG 840
GAACCCAGTA GAGGAGAAAA TAGAGAGTCA AACCCAGGAA GAGGTGAGAG ACAGCAAAGA 900
GAATATAGGA AAAATGAAC AAATCAACGA TGAGATGAAA CGCTCAGGGC AGCTTGGCAT 960
CCAGGAAGAA GATCTTCCGA AAGAGAGTAA AGACCAACTC TCAGATGATG TCTCCAAAGT 1020
AATGCTCTAT TTGAAGAGGT TAGTAAATGC TGCAGGAAGT GGGAGGTTAC AGAATGGGCA 1080
AATGCGGGAA AGGCCACCA GGCCTTTTGA GAAACCTCTT GATCTCTCAG CTATTATCA 1140
GCTGATGAA ATCTCAAGAT ATTACAGAT ACCCCAGAA GACTTAATT AGATGCTCAA 1200
AATGCGGGAG AAGCCGAATG GATCAGTGA ACCGGAGCGG GAGCTTGACC TTCTGTGTA 1260
CCTAGATGAC ATCTCAGAGG CTGACTTAGA CCATCCAGAC CTGTTCCAAA ATAGGATGCT 1320
  
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5	CTCCAGAGT	GGCTACCTA	AAACACCTG	TCGTGCTGG	ACTGAGGCC	TACCAGACGG	1380
	GCTCAGTGT	GAGGATATT	TAAATCTTT	AGGGATGGAG	AGTGCAGCAA	ATCAGAAAAC	1440
	GTGCTATTT	CCCATCCAT	ATAACAGGA	GAAAGTTCG	CCAAGGCTCC	CTTATGGTGC	1500
	TGGAAGATCT	AGATCBAACC	AGCTTCCCA	AGCTGCCTGG	ATTCCACATG	TTGAAAACAG	1560
	ACAGATGGCA	TATGAAAACC	TGAACBACAA	GGATCAAGAA	TTAGGTGAGT	ACTTGGCCAG	1620
	GATGCTAGTT	AAATACCTTG	AGATCATTA	TTCAAACCAA	GTGAAGCGAG	TTCTTGGTCA	1680
	AGGCTCATCT	GAAGATGACC	TGCAGGAAGA	GGAACAAAT	GAGCAGGCCA	TCAAAGAGCA	1740
	TTTGAATCAA	GGCAGCTCTC	AGGAGACTGA	CAAGCTGGCC	CCGCTGAGCA	AAAGGTTCCT	1800
10	TGTGGGGCCC	CCGAAGAATG	ATGATACCCC	AAATAGGCAG	TACTGGGATG	AAGATCTGTT	1860
	AATGAAAGTG	CTGGAATACC	TCAATCAAGA	AAAGGCAGAA	AAGGGAAGGG	AGCATATTGC	1920
	TAAGAGAGCA	ATGGAATAA	TGTAAGCTGC	TTTCATTAA	TACCTACTT	TCATTCTCTC	1980
	CACCCCAAGC	AAATCCCAAC	ATTTCCTTC	AGTGTGTTGA	CTTCTATCCT	GTTAACACTG	2040
	TAATATCTTT	AAATGATGTA	CAGGCAGATG	AAACCAAGTC	ACTGGGGAGT	CTGCTTCATT	2100
15	TCCTCTGAGC	TGTTATCTTG	TGTATGGATA	TGTGTAAATG	TTATGACTCC	TTGATAAAAA	2160
	ATTTATTATG	TCCATTATTC	AAGAAAGATA	TCTATGACTG	TGTTTAATAG	TATATCTAAT	2220
	GGCTGTGGCA	TTGTGTATGC	TCACATATGA	TAAAAAAGTG	TCCTATAAAT	CTATTGAAAG	2280
	TTTTTAATAT	TTATTGAATT	ATTTTGTAC	TGTCGTAGC	GTTTGTGGA	GTACTGAGCC	2340
	AAAAAATAA	AGCATTATAA	ATATA				2365
20	Seq ID NO: C154 DNA Sequence						
	Nucleic Acid Accession #: NM_030955						
	Coding sequence: 327..5108						
25	1	11	21	31	41	51	
	GAATTCGCGG	AGCGGGCGGG	CTGCGAGGCC	GCGGGGCATG	CGGGAGGCGG	AGGGGTGGGA	60
	CGGGGTGGGT	GGGCCCATTC	CACACCCGCC	GAAAGCGGAC	ACTGTCTAGT	GAATCACTCC	120
	CCCTTTAGGA	GGAGGGGAGG	GGAAAGAGTG	TCTAGCTAAT	TTCTGCTTAA	AAAAGCACAG	180
30	GAGATCGCGG	GTACGCTTTG	CAGTCGCTGC	CTTCTCGCGC	CTGACCATGC	ACCCCTGCAT	240
	CTTCTCGCTG	AGCGCTTTAT	TTCTGGAGCT	GAGGGCTAAA	ACTTTTTCAT		300
	CTTTCTCTCT	CCTCAACATC	TGAATCATGC	CATGTGCCCA	GAGGAGCTGG	CTTGCAAAAC	360
	TTTCGCTGCT	CTTCAAGCTC	CTTAACCTTG	GGGCGCTTTG	CTATGGGAGA	CAGCCTCAGC	420
	CAGGCCCGGT	TGCTTCCCG	GACAGGAGGC	AAGAGCATTT	TATCAGGGGC	CTGCCAGGAT	480
35	ACCACGTGGT	GGGTCCAGTC	CGAGTAGATG	CCAGTGGGCA	TTTTTTGTCA	TATGGCTTGC	540
	ACTATCCCAT	CACGAGCAGC	AGGAGGAAGA	GAGATTGGA	TGGCTCAGAG	GACTGGGTGT	600
	ACTACAGAA	TTCTCAGGAG	GAGAAGGACC	TGTTTTTAA	CTTGAAGGTC	AATCAAGGAT	660
	TTCTTTCCAA	TAGCTACATC	ATGGAGAAGA	GATATGGGAA	CCTCTCCCAT	GTTAAGATGA	720
	TGGCTTCCCT	TGCCCCCTCT	TGCCATCTCA	GTGACACGGT	TCTACAGCAG	GGCACCAGAG	780
40	TTGGGACCGG	AGCCCTCAGT	GCCTGCCATG	GACTGACTGG	ATTTTTCCAA	CTACCACATG	840
	GAGACTTTTT	CATTGAACCC	GTGAGAGAGC	ATCCACTGGT	TGAGGGAGGG	TACCACCCGC	900
	ACATCGTTTA	CAGGAGGCGG	AAAGTTCAG	AAACCAAGGA	GCCACCTGCT	GGATTAAAGG	960
	ACAGTGTAA	CATCTCCAG	AAGCAAGAGC	TATGGCGGGA	GAAGTGGGAG	AGGCACAACT	1020
	TGCCAAGCAG	AAGCCTCTCT	CGCGTTCCCA	TCAGCAAGGA	GAGTGGGGTG	GAGACACTGG	1080
45	TGTTGGCCGA	CACAAAGATG	ATTGAATACC	ATGGGAGTGA	GAATGTGGAG	TCTTACATTC	1140
	TCACCATCAT	GCACATGGTC	ACTGGGTGTT	TCCATAACCC	AAGCATTGGC	AATGCAATTC	1200
	ACATTGTTGT	GGTTCGGCTC	ATTCTACTCG	AAGAAGAAGA	GCAAGGACTG	AAAATAGTTC	1260
	ACCATGACGA	AAAGCTACAT	TCTAGCTTCT	GCBAGTGGCA	GAAGAGTATC	AATCCCAAGA	1320
	GTGACCTCAA	TCTGTTCAT	CACGACGTGG	CTGTCTCTCT	CACCAAGAA	GACATCTGTG	1380
50	CTGGTTTCAA	TGCCCCCTGC	GAGACCTTGG	GCCTGTCTCA	CCTTTCAGGA	ATGTTCTCAG	1440
	CTCACCGCAG	TTGTACATTC	AATGAAGATT	CGGAGCTGCC	TCTGGCTTTC	ACAATTGCC	1500
	ATGAGCTAGG	ACACAGCTTC	GGCATCCAGC	ATGATGGGAA	AGAAATGATC	TGTGAGCCTG	1560
	TGGGACAGCA	TCCGTACATC	ATGTCGCCGC	AGCTCCAGTA	CGATCCCACT	CGCTGTGATC	1620
	GGTCCAGATG	CAGCGAGGAG	TACATCACCC	GCTTCTTGGA	CGAGGCTTGG	GGGTCTGTGC	1680
55	TTGATGACAT	ACCTAAAAG	AAAGGCTTGA	AGTCCAAAGT	CATTGCCCCC	GGAGTGTATC	1740
	ATGATGTTCA	CACACAGTGC	CAGCTACAAT	ATGGACCCAA	TGCTACCTTC	TGCCAGGAAG	1800
	TAGAAAACCT	TGCCAGAGCA	CTGTGGTGCT	CGTGAAGGG	CTTTTGTGCG	TCTAAGCTGG	1860
	ACGCTGCTGC	AGATGGAAC	CAATGTGGTG	AGAAGAAGTG	GTGTATGGCA	GGCAAGTGCA	1920
	TCACAGTGGG	GAGAAACCA	GAGAGCATTC	CTGGAGGCTG	GGGCGCTGG	TCACCTTGGT	1980
60	CCCACTGTTT	CAGGACCTGT	GGGGCTGGAG	TCCAGAGCGC	AGAGAGGCTC	TGCAACCAAC	2040
	CCGAGCCAAA	GTTTGGAGGG	AAATATTGCA	CTGGAGAAAG	AAAACGCTAT	CGCTGTGCA	2100
	ACGTCCACCC	CTGTGCTCA	GAGGCACCAA	CATTTCGCGA	GATGCACTGC	AGTGAATTTC	2160
	ACACTGTTCC	CTACAGAAAT	GAACTCTACC	ACTGGTTTCC	CATTTTAAAC	CCAGCACATC	2220
	CTGTGTAGCT	CTACTGCCGA	CCCATAGATG	GCCAGTTTTC	TGGAATAATG	CTGGATGCTG	2280
65	TCATTGATGG	TACCCCTTGC	TTTGAAGCGC	GCAACAGCAG	AAATGTCTGT	ATTAAATGCA	2340
	TATGTAAGAT	GGTGTGGCTG	GACTATGAGA	TGATTTCCAA	TGCCACCGAG	GATCGCTGG	2400
	GTGTGTGCTT	GGGAGATGGC	TCTTCTGCCC	AGACTGTGAG	AAAGATGTTT	AAGCAGAGGG	2460
	AAGGATCTGG	TTATGTTGAC	ATTGGGCTCA	TTCCAAAAGG	AGCAAGGGAC	ATAAGAGTGA	2520
	TGGAATTTGA	GGGAGCTGGA	AACTTCCGGG	CCATCAGGAG	TGAAGATCCT	GAAAAATATT	2580
70	ACCTGAATGG	AGGGTTTATT	ATCCAGTGGG	ACGGGAACCTA	TAGCTTGGCA	GGGACTGTCT	2640
	TTCAATATGA	CAGGAAGGGA	GACCTGGAAA	AGCTGATGGC	CACAGGTCCC	ACCAATGAGT	2700
	CTGTGTGGAT	CCAGCTTCTA	TTCCAGGTGA	CTAACCTTGG	CATCAGTAT	GAGTACACAA	2760
	TCCAGAAAGA	TGCGCTTGAC	AATGATGTTG	AGCAGATGTA	CTTCTGGCAG	TACGGCCACT	2820
	GGACAGAGTG	CAGTGTGAAC	TGCGGGACAG	GTATCCGCGG	CCAAACTGCC	CATTGCATAA	2880
75	AGAAGGGCGG	CGGAGTGGTG	AAAGCTACAT	TCTGTGACCC	AGAAACACAG	CCCAATGGGA	2940
	GACAGAAAG	GTGCCATGAA	AAGGCTTGTG	CACCCAGGTG	GTGGGCAGGG	GAGTGGGAAG	3000
	CATGCTCGGC	GACATGCGGG	CCCCACGGGG	AGAAGAAGCG	AAACCTGTCTG	TGCATCCAGA	3060
	CCATGGCTCT	TGACGAGCAG	GCTCTCCCGC	CCACAGACTG	CCAGCACCTG	CTGAAGCCCA	3120
	AGACCTCTCT	TTCTCTCAAC	AGAGACATCC	TGTGCCCTCT	GGACTGGACA	GTGGGCAACT	3180
80	GGAGTGAGTG	TTCTGTGTTT	TGTGGTGGTG	GAGTGGGAT	TGCTAGTGTG	ACATGTGCCA	3240
	AGAACCATGA	TGAACCTTGC	GATGTGACAA	GGAAACCCAA	CAGCCGAGCT	CTGTGTGGCC	3300
	TCCAGCAATG	CCCTTCTTAC	CGGAGAGTTC	TGAACCCAA	CAAGGCACCT	ATTTCCATAG	3360
	GAAAAAACCC	ACCAACACTA	AAGCCCGTCC	CTCCACCTAC	ATCCAGGCC	AGAAATGCTGA	3420
	CCACACCCAC	AGGCGCTGAG	TCTATGAGCA	CAAGCACTCC	AGCAATCAGC	AGCCCTAGTC	3480
	CTACCAAGC	CTCCAAAGAA	GGAGACCTGG	GTGGGAACA	GTGGCAAGAT	AGCTCAACCC	3540

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AACCTGAGCT GAGCTCTCGC TATCTCATTT CCACTGGAAG CACTTCCCAG CCCATCCTCA 3600
CTTCCCAATC CTTGAGCAAT CAGCCCAAGT AGGAAAATGT TTCCAGTTCA GATACTGGTC 3660
CTACTCGGA GGGAGGCCCT GTAGCTACAA CAACAAGTGG TTCTGGCTTG TCATCTTCCC 3720
GCAACCCCTAT CACTTGGCCT GTGACTCCAT TTTACAATAC CTTGACCAAA GGTCCAGAAA 3780
TGGAGATTCA CAGTGGCTCA GGGGAAGAAA GAGAACAGCC TGAGGACAAA GATGAAAGCA 3840
ATCCTGTAAT ATGGACCAAG ATCAGAGTAC CTGGAAATGA CGCTCCAGTG GAAAGTACAG 3900
AAATGCCACT TGCACCTCCA CTAACACCAG ATCTCAGCAG GGAGTCTCTG TGGCCACCCCT 3960
TCAGCAGAGT AATGGAGGGA CTGCTCCCCA GCCAAAGGCC CACTACTTCC GAAACTGGGA 4020
CACCACAGAT TGAGGGGATG GTTACTGAAA ASCCAGCCAA CACTCTGCTC CCTCTGGGAG 4080
GAGACCAACA GCCAGAACCC TCAGGAAAGA CGGCAACCG TAACCACTG AACTTCCAA 4140
ACACATGAAA CCAACAAAAA AGTTCTGAAC CAGTCTGTAC TGAGGAGGAT GCAACAAGTC 4200
TGATTACTGA GGGCTTTTGG CTAAATGCTT CCAATTACAA GCAGCTCACA AACGCCACG 4260
GCTCTGCACA CTGATCTGTC GGAACTGGA GCGAGTGCTC CACCAATGT GGCCTGGGG 4320
CCTACTGAAA AAGGGTGGAG TGCAACACCC AGATGGATTC TGACTGTGCG GCCATCCAGA 4380
GACCTGACCC GGCAGAAACG TGCCACCTCC GTCCCTGTGC TTGGCTGAAA GTGGGAAACT 4440
GGAGCAAGTG CTCAGAACAC TGCACTGGGG GCTTCAGAT ACGCAGATT CAGTGGCTGG 4500
ACAGCCGGGA CCACCGGAAC CTGAGGCCAT TTCCTGCCA GTTCTTGGCC GGCATTCTTC 4560
CCCATTTGAG CATGAGCTGT AACCCGGAGC CCTGTGAGGC GTGGCAGGTG GAGCCTTGA 4620
GCCAGTGCTC CAGTCTCTGT GGAAGTGGAG TTCAGGAGAG AGGAGTGTTC TGTCCAGGAG 4680
GCCTCTGTA TTGAGACAAA AGACCCACAT CCACCATGTC TTGCAATGAG CACCTGTGCT 4740
GTCACTGGGC CACTGGGAAC TGGGAOCTGT GTTCCACTTC CTGTGAGGT GGCCTTCAGA 4800
AGAGGATTGT CCAATGTGTG CCCTCAGAGG GCAATAAAC TGAAGACCAA GACCAATGTC 4860
TATGTGATCA CAACCCGAGA CCTCCAGAT TCARAAATG CAACAGCAG GCCTGCAAGA 4920
AAGATGCCGA TTTACTTTGC ACTAAGGACA AACTGTGAG CAGTTTCTGC CAGACACTGA 4980
AAGCCATGAA CAAATGTCT GTGCCACCG TGAGGGCTGA GTGCTGCTTC TCGTGTCCCC 5040
AGACACACAT CACACACACC CAAAGGCAAA GAAGGCAACG GTTGTCCAA AAGTCAAAAG 5100
AACTCTAAGC CAAA 5115

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30
Seq ID NO: C155 DNA Sequence
Nucleic Acid Accession #: NM_001062.1
Coding sequence: 76..1380

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1 11 21 31 41 51
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GCCTCTCATTA CCTCTGCGCC ATCACTTAAT AAATAGCCAG CCAATTTCATC AACATTCTGG 60
TACACTGTGTG GAGAGATGAG ACAGTCAAC CAGCTGCCCC TAGTGGGGCT CTACTGTGTT 120
CTTTTATTC CAGGCCAAT ATGCGAGATT TGTGAGGTAA GTGAAGAAAA CTACATCCGC 180
CTAAACCTTC TGTGAATAC AATGATCCAG TCARAAATTA ACAGGGGAAC CAGCGCTGTC 240
AATGTGTGT TGTCCCTCAA ACTTGTGTGA ATCCAGATCC AACCCCTGAT GCAAAAGATG 300
ATCCAAACAA TCAATACAAA TGTGAAAAGC AGATTGTGAG ATGTAAGCTC GGGAGAGCTT 360
GCCTTGATTA TACTGGCTTT GGGAGTATGT CGTAAGCTG AGGAAAACCT AATATATGAT 420
TACCACCTGA CTCACAGCT AGAAAATAAA TTCCAGCAG AAATTGAAA TATGGAAGCA 480
CACAAAGGCA CTCCTCTGAC TAACCTACTAC CAGCTCAGCC TGGAGGTTTT GGCCTGTGTT 540
CTGTTCAATG GGAACCTACT AACCCGCCAA GTTGTCAACC ACTTCACCTC TGAATAATAA 600
AACTATTAT TGGGTAGCCA GTTCTCAGTA GATAGTGGTG CAATGGCTGT OCTGGCTCTG 660
ACCTGTGTGA AGAAGAGTCT AATAAATGG CAGATCAAG CAGATGAAG CAGTTTAAAG 720
AACATCAGTA TTTATACAAA GTCACTGGTA GAAAAGATT TGTCTGAGAA AAAAGAAAA 780
GGTCTCATG GAACACATT TAGCACAGGA GAAGCCATGC AGGCCCTCTT TGTATCATCA 840
GACTATTATA ATGAAAATGA CTGGAATTGC CAACAAACTC TGAATACAGT GCTCACGGAA 900
ATTTCTCAG GAGACTCAG TAATCCAAAC GCTGCAGCCC AGGCTCTTAC TGCCCTGATG 960
GGAAGACCT TCTTGGATAT TAACAAAGAC TCTTCTTGG TCTCTGCTTC AGGTAACCTC 1020
AACATCTCC CGATGAGCC TATAACTGTG ACACCTCCG ACTCACAACT ATATATCTCC 1080
GTCAATTACT CTGTGAGAA CAATGAAACA TATTTCAACA ATGTCACTGT GCTAAATGGT 1140
TCGTCTTCC TCAGTGTGAT GGAAGAAAGC CAGAAAATGA ATGATACTAT ATTGGTTTC 1200
ACAAAGGAG AGCGCTCATG GGGGCCCTAT ATCACTGTA TTCAGGGCTC ATGTGCCAAT 1260
AATAAGACA GAACCTACTG GGAACCTCTG AGTGGAGGCG AACCACTGAG CCAAGGAGCT 1320
GGTAGTTAG TTGTCCGCAA TGGAGAAAC TTGGAGGTTG GCTGGAGCAA ATACTAATAA 1380
GCCCAAACTT TCCTCAGCTG CATAAAATCC AATTGCACTG GAGTTCATG TTTATTGTCC 1440
TTATGCCCTC TTCTTCATTT ATCCAGTAC GAGCAGGAGA GTTAATAACC TCCCCTTCTC 1500
TCTCTACATG TTCAATAAAA GTTGTGTAAA GATTAAC 1537

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65
Seq ID NO: C156 DNA Sequence
Nucleic Acid Accession #: NM_004591
Coding sequence: 59..349

70
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80

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1 11 21 31 41 51
| | | | |
CACTCCCAAA GAAGTGGGTA CTCACACTG AGCAGATCTG TTCTTTGAGC TAAAAACCT 60
GTGCTGTACC AAGAGTTTGC TCCTGGCTGC TTTGATGTCA GTGCTGTAC TCCACCTCTG 120
CGGCAATCA GAAGCAGCAA GCAACTTTGA CTGCTGTCTT GGATACACAG ACCGTATTCT 180
TCATCTTAAA TTTATTGTGG GCTTCACAGC GCAGCTGGCC AATGAAGGCT GTGACATCAA 240
TGCTATCATC TTTCACACAA AGAAAAAGTT GTCTGTGTGC GCAAAATCAA AACAGACTTG 300
GGTGAATAT ATTGTGCGTC TCCTCAGTAA AAAAGTCAAG AACATGTAAA AACTGTGGCT 360
TTTCTGGAAT GGAATTGGAC ATAGCCCAAG AACAGAAAGA ACCTTGCTGG GGTGTGAGGT 420
TTCCTTGCA CATCATGGAG GGTTTAGTGC TTATCTAATT TGTGCCCTAC TGGACTTGTC 480
CAATTATGA AGTGTATTCA TATTGCATCA TAGTTTGTCT TGTTTAAGCA TCACATTAAA 540
GTTAAACTGT ATTTTATGTT ATTTATAGCT GTAGGTTTTT TGTGTTTAGC TATTTAATAC 600
TAATTTTCCA TAAGCTATTT TGGTTTAGTG CAAAGTATAA AATTATATTT GGGGGGGAAT 660
AAGATTATAT GGACTTTCTT GCAAGCACA AGCTATTTTT TAAAAAACT ATTTAACATT 720
CTTTGTGTTA TATTGTTTGG TCTCTAAAT TGTGTGTAAT GCATTATAAA ATAAGAAAAA 780
CATTAATTAAG ACAAATATT 799

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Seq ID NO: C157 DNA Sequence
Nucleic Acid Accession #: NM_013271.1

Coding sequence: 27..809

	1	11	21	31	41	51	
5	TCCGGAGCCA	GGCTCGCTGG	GGCAGCATGG	CGGGGTGCGC	GCTGCTCTGG	GGGCGCGGGG	60
	CCGGGGCGGT	CGGCTTTTGG	GTGCTGCTGC	TGCTCGGCTT	GTTTCGGCCG	CCCCCGCGGC	120
	TCTGCGCGCG	GCCGGTAAAG	GAACCCCGCG	GCCTAAGCGC	AGCGTCTCGG	CCCTTGGCTG	180
	AGACTCGCGC	TCCTCGCGCG	TTCCGCGGGT	CAGTGCCCGG	AGGTGAGCGG	GCGGGGGCGG	240
10	TGCAGGAGCT	GGCGCGGGCG	CTGGCGCATC	TGCTGGAGGC	CGAACGTCAG	GAGCGGGGCG	300
	GGGCGGAGGC	GCAAGGAGCT	GAGGATCAGC	AGGCGCGCGT	CCTGGGCGAG	CTGCTGCGCG	360
	TCTGGGGCGC	CCCCCGCAAC	TCTGATCCGG	CTCTGGGCTT	GGACGACGAC	CCCGACGCGC	420
	CTGCAGCGCA	GCTCGCTCGC	GCTCTGCTCC	GCGCCCGCCT	TGACCTTGCC	GCCCTAGCAG	480
	CCAGCTTGT	CCCGCGCGCC	GTCCCGCGCG	CGCGCTCCG	ACCCCGGCCG	CGGCTCTACG	540
15	ACGACGCGCC	CGCGGGCGCG	GATGCTGAGG	AGCGAGGCGA	CGAGACACCC	GACGTGGACC	600
	CGAGCTGTT	GAGTACTTGG	CTGGGACGGA	TTCTTGCGGG	AAGCGCGGAC	TCCGAGGGGG	660
	TGGCAGCCCC	GCGCGGCTCT	CGCGTGCGCG	CCGACCAAGA	TGTGGGCTCT	GAGCTGCCCG	720
	CTGAGGGCGT	GCTGGGGGCG	CTGCTGCGTG	TGAAACGCTT	AGAGACCCCG	GCGCCCCAGG	780
	TGCTGTGCA	CGGCTCTCTG	CCACCCGTAG	CAGTGCGCGG	ATCCCGTGCA	CCCTGGGACC	840
20	CAGAAAGTCC	CCGCGCATCC	CGCCACACAG	ACTTCTCCCC	GCCAGCACGT	CCAGAGCAAC	900
	TTACCCCGGC	CAGCCAGCCC	TCTACCCCGA	GGATCCCTAC	CCCTGGGCC	ACAATAACAT	960
	GATCTGAGC						969

Seq ID NO: C158 DNA Sequence

Nucleic Acid Accession #: NM_002245.2

Coding sequence: 183..1193

	1	11	21	31	41	51	
30	GGGCAGGAAG	ACGGCGCTGC	CGGAGGAGC	GGGGCGGGCG	GGCGCGCGGG	GGAGCGGGCG	60
	GCGGGCGGGA	GCCAGGCCCG	GGCGGGGGCG	GGGGCGGGCG	GGCCAGAAGA	GGCGGGGGCG	120
	CGCGCTCCGG	CCGCTCTGCG	GCGTTGCGCT	TGGCTTTGGC	TTTGGCGGGG	GCGGTGAGAA	180
	AGATGCTGCA	GTCCTTGCCG	GGCAGCTGCT	GCGTGCGCCT	GGTGGAGCGG	CACCGCTCGG	240
	CTTGGTGTCT	CGGCTTCTTG	GTGCTGGGCT	ACTTGCTCTA	CCTGGTCTTC	GGCGCAGTGG	300
35	TCTTCTCTCT	GGTGAGCTCG	CCCTATGAGG	ACCTGCTGCG	CCAGGAGCTG	CGCAAGCTGA	360
	AGCGACGCTT	CTTGGAGGAG	CACGAGTGCC	TGTCTGAGCA	GCAGCTGGAG	CAGTTCTCTG	420
	GCGGGTGCT	GGAGGCCAGC	AACTACGGCG	TGTGGTGCT	CAGCAACGCC	TGGGGCACT	480
	GGAACTGGGA	CTTCACTTCC	GCGCTCTTCT	TCGCCAGCAC	CGTGCTCTCC	ACCACAGGTT	540
	ATGGCCACAC	GCTGCCCTTG	TCAGATGGAG	GTAAGGCCCT	CTGCATCATC	TACTCGGTCA	600
40	TTGGCATTCC	CTTCACTCTC	CTGTTCTTGA	CGGCTGTGGT	CCAGCGCATC	ACCGTGCAAG	660
	TCACCGCGAG	CCGGGTCTCT	TACTTCCACA	TCGCTGGGGG	CTTCTCCAAG	CAGGTGGTGG	720
	CCATGCTCCA	TGGCTGTGCT	CTTGGGTTTG	TCACTGTGTC	CTGCTTCTTC	TTCATGCCCG	780
	CGCGTGTCTT	CTCAGTCTCT	GAGGATGACT	GGAACCTTCT	GGAATCCTTT	TATTTTGTGT	840
	TTATTTCCCT	GAGCAACATT	GGCTTGGGGG	ATTATGTGCC	TGGGGAAGGC	TACAATCAAA	900
45	AATTGAGAGA	GCTCTATAAG	ATTGGGATCA	CGTGTACCTT	GCTACTTGGC	CTTATTTGCC	960
	TGTTGGTAGT	TCTGTAAGAC	TTCTGTGAAC	TCATGAGGCT	GAAAAAATTC	AGAAAAATGT	1020
	TCATGTGAA	GAGGACCAAG	GACGAGGATC	AGGTGCACAT	CATAGAGCAT	GACCAACTGT	1080
	CCCTCTCTCT	GATCACAGAC	CAGGCAGCTG	GCATGAAAGA	GGACCAAGA	CAAAATGAGC	1140
	CTTTTGTGGC	CACCCAGTCA	TCGCTCTGCG	TGGATGGCCC	TGCRAACCAT	TGAGCGTAGG	1200
50	ATTGTTTGCA	TTATGCTAGA	GCACCAAGGT	CAGGGTGCAA	GGAGAGGGCT	TAGTATGTGT	1260
	CATTTTATCT	AGAAATGAAA	AGCGAAATTT	ATGTCACTTT	AGAAATAGC	TACGTTTGGC	1320
	AAATGCTTAT	TAAAAACAAA	CAAAAAAAGA	CACATGGAAC	AAAGAAGCTG	TGACCCGAGC	1380
	AGGATGCTTA	ATATGTGAGG	AAATGAGATG	TCCACCTAAA	ATTCAATATG	GACAAATTA	1440
	TCTGGACCTT	ACATAGGAGG	AGAATACTTG	AAGCAGTATG	CTGCTGTGGT	TAGAGCAGA	1500
55	TTTATACTTT	TAACTGGAGA	ACTTTGGGGT	TTGCATTTAG	ATCATTTAGC	TGATGGCTAA	1560
	ATAGCAAAAT	TATATTTTGG	ANGCAAAAAN	AAAAAGCATA	GAGATGTGTT	TTATAAATAG	1620
	GTTTATGTGT	ACTGGTTTGC	ATGTACCCAC	CCAAAATGAT	TATTTTGGGA	GAATCTAAGT	1680
	CAAACTCAT	ATTATATAAT	CATAGGTAAC	CATTAACTAT	GTACATATAA	AGTATAAATA	1740
	TGTTTATATT	CTGTACATAT	GGTTTAGGTC	ACCAGATCCT	AGTGTAGTTC	TGAAACTAAG	1800
60	ACTATAGATA	TTTGTGTTCT	TTTGATTTCT	CTTTATACTA	AAGATCCAG	AGTTGCTACA	1860
	ATAAAAAAG	GGAATAATA	AACTTGAGAG	TGAATAACCA	T		1901

Seq ID NO: C159 DNA Sequence

Nucleic Acid Accession #: NM_005472.1

Coding sequence: 93..404

	1	11	21	31	41	51	
65	AAAGGGACTC	CTTGAAACTG	ATTGAGAGCC	CAGTGGATTT	GCCAGCAGTT	TGAGCTTCTA	60
	CCBAGTCTTC	CCCCACCTCA	ATCCCTGTGT	CTATGGAGAC	TACCAATGGA	ACGGAGACCT	120
70	GGTATGAGAG	CTGCTATGCG	GTGCTGAAGG	CTCTAAATGC	CACCTCTCAC	AGCAATTGTC	180
	TCTGCGGGCC	AGGGCCAGGG	CTGGGGCCAG	ACAAACAGAC	TGAAGAGAGG	CGGGCCAGCC	240
	TACCTGGGCC	TGATGACAA	TCCFACATGT	ACATCTCTCT	TGTCATGTTT	CTAFTTGTCT	300
	TAACTGTGGG	CAGCCTCATC	CTGGGATACA	CCCCCTCCCG	CAAAGTGGAC	AAGCGTAGTG	360
75	ACCCCTATCA	TGTGTATATC	ANGAAACGCT	TGCTATATAT	CTAACACGAG	AGGGCTGGGA	420
	CGGTGGAAGA	CCAGACACCC	TGGGATTGCT	GTCTGGGGCC	TCCAGAACTC	TGCTGTGGAC	480
	TGCATCAGGT	CT					492

Seq ID NO: C160 DNA Sequence

Nucleic Acid Accession #: NM_005245.1

Coding sequence: 187..13959

	1	11	21	31	41	51	
80	CTGGGCGGGC	GGGCGCGGGG	AGAGGGCGCG	GGAGCGGCTC	GTGCGGAGG	TACCATGGGG	60

	ACGGGCGAGC	CCGGCGAGGC	CCGGCGAGGC	CCGTCCCTGC	TCGGGGGCGC	GCTGAGACGG	120
	CGGGTGAGCT	CCACGAGAGC	GCCGTGCGCA	CTTGGGGCCA	ACTTTGCGAT	TCCGACAGT	180
	TAAGCAATGG	GGAGACATTT	GGCTTTGCTC	CTGCTTCTGC	TCCTTCTCTT	CCAACATTTT	240
5	GGAGACAGTG	ATGGCAGCCA	ACGACTTGAA	CAGACTCCTC	TGCAGTTTAC	ACACCTCGAG	300
	TACAACTGCA	CCGTGACGGA	GAACTCTGCA	GCTAAGACTT	ATGTGGGGCA	TCCTGTCAAG	360
	ATGGGTGTTT	ACATTACACA	TCAGCGTGG	GAAGTAAGGT	ACAAAATTGT	TTCCGGAGAC	420
	AGTGAAACC	TGTTCAAAGC	TGAAGAGTAC	ATTCTGGGAG	ACTTTTGCTT	TCTAAGAAAT	480
	AGGACCAAAG	GAGGMAATAC	AGCTATTCTT	AATAGAGAAG	TGAAGGATCA	CTACACATTG	540
10	ATAGTGAAG	CACTTGAAAA	AAATACTAAT	GTGGAGGCGC	GAACAAAGGT	CAGGGTGCAG	600
	GTGCTGGATA	CAATAGACTT	GAGACCGITA	TTCTCACCCA	CCTCATACAG	CGTTTCTTTA	660
	CCTGAAACA	CAGCTATAAG	GACCACTATC	GCAAGAGTCA	GCGCCACGGA	TGCAGACATA	720
	GGAAACCAAG	GGAAATTTTA	CTACAGTTT	AAAGATCGAA	CAGATATGTT	TGCTATTTCAC	780
	CCAACCAAGT	GTGTGATAGT	GTTAACTGGT	AGACTTGATT	ACCTAGAGAC	CAAGCTCTAT	840
15	GAGATGGAAA	TCCTCGCTGC	GGACCGTGGC	ATGAAGTTGT	ATGGGAGCAG	TGGCATCAGC	900
	AGCAATGGCA	AGCTACCGGT	GCACATCGAA	CAGGCCAATG	AATGTGCTCC	GGTGATAACA	960
	GCAGTGACAT	TGTCACCATC	AGAATCGGAC	AGGGACCCAG	CATATGCAAT	TGTGACAGTG	1020
	GATGACTCGG	ATCAGGCTGC	CAATGGTGAC	ATAGCATCTT	TAAGCATCGT	GGCAGGTGAC	1080
	CTTCTCCAGC	AGTTTACAAC	AGTGAGGTCC	TTTCCAGGGA	GTAAGGAGTA	TAAAGTCAAA	1140
20	GCCATCGGTG	ACATTGATTG	GGACAGTCAT	CCTTTCGGCT	ACAATCTCAC	ACTACAGGCT	1200
	AAAGATAAAG	GAACTCCGCC	CCAGTTCTCT	TCTGTTAAAG	TCATTCACBT	GACTTCTCCA	1260
	CAGTTCAAAG	CCGGGCCAGT	CAAGTTTGAA	AAGGATGTTT	ACAGAGCAGA	AATAAGTGAA	1320
	TTTGCTCCTC	CCAAACACCC	TGTGGTCATG	GTAAGGCCCA	TTCTTGCTTA	TTCCCATTTG	1380
	AGGTATGTTT	TAAAGGAGC	ACCTGGAAAA	GCTAAATTCA	GTTTAAATTA	CAACACTGGT	1440
25	CTCATTTCTA	TTTGAAGAAC	AGTTAAAGAA	CAGCAGGCGG	CCCATTTTGA	ACTTGAAGTA	1500
	ACAAACAAGT	ACAGAAAGAG	GTCCACCAAG	GTCTTGGTGA	AAGTCTTAGG	TGCAAAATAGC	1560
	AATCCCCCTG	AATTACCCCA	GACAGCGTAC	AAAGCTGCTT	TGATGAGAAA	CGTGCCCATT	1620
	GGTACTACTA	TCATGAGCCT	GAGTGGCGTA	GACCTGATG	AGGGTGAGAA	TGGGTACGTG	1680
	ACATACAGTA	TCCGAAATTT	AAATCAATGT	CCGTITGCGA	TGACCATTTT	CACGTGGTGC	1740
30	GTGAGTACGT	CAGAAAACCT	GGACTACGAA	CTGATGCTTC	GGGTTTATAC	TCTGAGGATT	1800
	CGTGATCAG	ACTGGGGCTT	GCCGTACCGC	CGGGAAGTCG	AAGTCTTTCG	TACAATTACT	1860
	CTCAATAACT	TGAATGACAA	CACACCTTTG	TTTGAGAAAA	TAAATTTGTA	AGGGACAATT	1920
	CCAGAGATC	TGCTGGCAGG	AGAGCAAATA	ACCCTGTTT	CTGCTATTGA	TGCAGATGAA	1980
	CTTCAGTTGG	TACAGTATCA	GATTGAAGCT	GGAATGAAAC	TGGATTGTGT	TAGTTTAAAC	2040
35	CCCACTCGG	GGGTATTGTC	ATTAAAGCGA	TGCTAATGG	ATGGCTTAGG	TGCAAAAGTG	2100
	TCCTTCCACA	GTCTGAGAAAT	CACAGCTACA	GATGGAGAAA	ATTTTGGCAC	ACCATTATAT	2160
	ATCAACATAA	CAGTGGCTGC	CAGTCACAAG	CTGGTAAACT	TGCAGTGTGA	AGAGACTGGT	2220
	GTGTCCAAAG	TGCTGGCAGG	GAGCTCTCTG	CAGGCCAAATA	AATTACACAA	CCAGGGAGAG	2280
	GTGGAGGATA	TTTCTCTGAA	TTCTCACTCT	GTCAATGCTC	ACATACCGCA	GTTTAGAAGC	2340
40	ACTCTTCCGA	CTGGATTTC	GCTAAGGAA	AACCAAGCTG	TGGTTCCTAG	TGTAATTTTC	2400
	ATGAACCTCA	CTGACCTTGA	CACCTGGCTTC	AATGGAAAAAC	TGGTCTATGC	TGTTTCCTGA	2460
	GGAAATGAGG	ATAGTTGCTT	CATGATTGAT	ATGGAACACG	GAATGCTGAA	AATTTTATCT	2520
	CCCTCTGACC	TGGAACCAAC	AGACAAATAC	ACCTGAAATA	TTACGCTCTA	TGACCTTGGG	2580
	ATACCCGAGA	AGGCTGGGTG	CGCTCTTCTA	CATGTCGTGG	TGTCGATGTC	CAATGATAAT	2640
45	CCACCCGAGT	TTTTACAGGA	GAGCTATTTT	GTGGAAGTGA	GTGAAGACAA	GGAGGTACAT	2700
	AGTGAAATCA	TCCAGGTTGA	AGCCACAGAT	AAAGACCTGG	GGCCCAACGG	ACACGTGACG	2760
	TACTCAATTC	TTACAGACAC	AGACACATTT	TCAATTGACA	GCGTGACCGG	TGTTGTTAAC	2820
	ATCCACGCC	CTCTGAGTGC	AGAGCTGCAG	CATGAGCACT	CCTTAAAGAT	TGAGGCCAGG	2880
	GACCAAGCCA	GAGAAGAGCC	TCAGCTGTTC	TCCACTGTGC	TTGTGAAAGT	ATCACTAGAA	2940
50	GATGTTAAT	ACAACCCACC	TACATTTATT	CCACCTAATT	ATCTGTGTGA	AGTCCGAGAG	3000
	GATCTTCCAG	AGGAACCGT	CATCATGTGG	TTAGAAGCCC	ACGATCTCTA	TTAGGTCTAG	3060
	TCGTGTCAGG	TGAGATACAG	CCCTCTGGAC	CACGAGAGAG	GAACCTTCTA	TGTGGATAAA	3120
	CTCAGTGGAG	CAGTTAGGAT	CGTCCAGCAG	TTGGACTTTG	AGAAGAGGCA	AGTGTATAT	3180
	CTCACTGTGA	GGGCCAAAGA	CAAGGGAAAG	CCAGTTTCTC	TGCTTCTTAC	TGCTATGTT	3240
55	GAAGTTGAGG	TGTTGATGT	GAATGAGAAC	CTGCACCCAC	CGGTGTTTTC	CAGCTTTGTG	3300
	GAAGAGGGGA	CAGTGAAAGA	AGATGCACCT	GTGGGTTCAAT	TGGTAATGAC	GGTGTCCGCT	3360
	CATGATGAGG	AGCCCGGAGG	AGATGGGGAG	ATCGGATACT	CCATTAGAGA	TGGCTCTGGC	3420
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 Coding sequence: 66..1211

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 60 TTCCAGTGG TACTGTTGTG GAATATGAGT GCGGTCCAGG TTACAGAGA GAACCTTCTC 480
 TATCACCAAA ACTAATCTGC CTTCAGATT TAAATGGTC CACAGCAGTC GAATTTTGA 540
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 65 CGACTTCTAG TTTTGTCTT ATTTCAAGGA GCTCTGTCCA GTGGAGTGAC CGGTGCCAG 720
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 CACCACCTGA ATGCAGAGGA AAATCTCTAA CTTCAGGT CCCACCAACA GTTCAGAAAC 960
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 TCTTTGGCTG TAAGCATTTC TCATCTTTC TCGGGTTGG CAAATATATT TAAAGGTAAA 1740
 ACATCTGCTG GAACCGGGG TGTGTATGTT GATAAGGGAG GAATATAGAA TGAAGACTG 1800
 AATCTTCTT TGTGTGACAA ATAGAGTTTG GAAAAGCCT GTGAAGGTG TCTTCTTTGA 1860
 CTTAATGTCT TAAAAATAT CCAGAGATAC TACATATTA ACATAAGAAA AGATTATATA 1920

TTATTTCCTGA ATCGAGATGT CCATAGTCAA ATTTGTAAAT CTTATTCTTT TGTAATATTT 1980
 ATTTATATTT ATTTATGACA GTGAACATTG TGATTTTACA TGTAATAACA GAAAAGTTGA 2040
 AGAAGATATG TGAAGAAAAA TGTATTTTTC CTAATATAGAA ATAAATGATC CCATTTTGTG 2100
 GT 2102

Seq ID NO: C167 DNA Sequence
 Nucleic Acid Accession #: Eos sequence
 Coding sequence: 1..2651

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 15 CTTTCCAAAC TCAGCGTCTT CACCTCCTAC CTAGACCTCA GTATGAACAA CATCAGTCAG 240
 CTGCTCCCGA ATCCCTGACC CAGTCTCCGC TTCCTGGAGG AGTTACGTCF TGGCGGAAAC 300
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 25 GAATACATTT TCTATGACAA TCCATCCCAA TTTGTTGGGA GATCTGCTTT TCAACATTTA 840
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 30 GAAATCTACG AAATTAAGT TGACACTTTC CAGCAGTTGC TTAGCCTCCG ATGCTGAAAT 1140
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 35 TGAGAGATG CCTATAAGAT TTCTAATCAA TGGAAATAAG GTGACAACAG CAGTATGGAC 1440
 GACCTTCATA AGAAGATGTC TGGAAATGTT CAGGCTCAAG ATGAACGTGA CCTTGAAGAT 1500
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 CCAGGCCCTC TCAAACTCTG TGAACACTTG CTGTATGGCT GGCTGATCAG AATTGGAGTG 1620
 40 TGGACACTAG CAGTCTGGGC ACTTACTTGT AATGCTTTGG TGACTTCAAC AGTTTTCAGA 1680
 TCCCTCTGCT ACATTTCCCT CATTAACCTG TTAATTGGGG TCATCGCAGC AGTGAACATG 1740
 CTCACGGGAG TCTCCAGTGC CTGTCTGGCT GGTGTGGATG CBTTCATTTT TGGCAGCTTT 1800
 GCACGACATG GTGCTGTGGT GGGAAATGGG GTTGGTTGCC ATGTCAATGG TTTTGTCTCC 1860
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 45 TCTGTGAAT TCTGTGCAAA ATTTGAAACG AAAGCTCCAT TTTCTAGCCT GAAAGTAATC 1980
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 TACATGGTGG CTCTCATCTT GCTCAATTCC CTTTGCATCC TCATGATGAC CATTTGCTTAC 2160
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 50 GTAAACACA TTTCCCTGTT GCCTTCCACC AACTGCATCC TAAACTGCCC TGTGGCTTTC 2280
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 CTTCTGGTGG TAGTCCACT TCCGTGATGT CTCATCCCTC TTCTCTACAT CTGTGTTCAAT 2400
 CCTCACTTTA AGGAGGATCT GGTGAGCCTG AGAAAGCRAA CCTACGCTG GACAAAGATCA 2460
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 55 ACTCAAGCCT TGGTAAACCT TACCAGCTCC AGCATCACIT ATGACCTGCC TCCCACTTCC 2580
 GTGCCATCAC CAGCTTATCC AGTGAAGTGG AGCTGCCATC TTTCTCTGTG GGCATTTGTC 2640
 CCATGCTTA A 2651

Seq ID NO: C168 DNA Sequence
 Nucleic Acid Accession #: NM_003667.2
 Coding sequence: 49..2772

60 1 11 21 31 41 51
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 65 CCGAGTCTG GTGTGTTGCT GAGGGGCTGC CCCACACACT GTCAATTGCGA GCCCGACGCG 180
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 AGCTCTTCA CTTCTTACTT AGACCTCAGT ATGAACACCA TCAGTCAAGT GCTCCCGAAT 300
 70 CCCCAGCCCA GTCTCCGCTT CTTGGAGGAG TTACGTCTTG CGGGAAACGC TCTGACATAC 360
 ATTCCCAAGG GAGCATTCAC TGGCCTTTAC AGTCTTAAAG TTCTTATGCT GCAGATAAT 420
 CAGCTAAGAC ACCTACCCAC AGAAGCTCTG CAGAATTTGC GAAGCCTTCA ATCCCTGCGT 480
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 75 TTATCGCAT TGCAGCCAT GACCTTGGCC CTGAACAAAA TACACACAT ACCAGACTAT 660
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 80 ACATAACAT TCTATGACAA TCCCATCCAA TTTGTTGGGA GATCTGCTTT TCAACATTTA 960
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 GAAGATTAC CCACTTTTTC AGTCTGCCAA AAGCTTCAGA AAATTGACCT AAGACATAAT 1200
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5 TGGCTTGGG ACAAATTCG TATTATTAC OCCAATGCAT TTCCACTTT GCCATCCCTA 1320
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 TGGACCATAG CAGTTCTGGC ACTTACTTGT AATGCTTTGG TGACTTCAAC AGTTTTCAGA 1800
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 CTCACGGGAG TCTCCAGTGC CGTGCTGGCT GGTGTGGATG CGTTCACCTT TGGCAGCTTT 1920
 GCACGACATG GTGCTTGGTG GGAGAAATGG GTTGGTTGCC AIGTCATTGG TTTTGTGTCC 1980
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 25 AAACACCCAA GCTTGATGTC AATTAACTCT GATGATGTGG AAAACAGTTC CTGTGACTCA 2640
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 GTGCCATCAC CAGCTTATCC AGTGACTGAG AGCTGCCATC TTTCTCTGT GGCATTGTCT 2760
 CCATGTCTCT AATTATATAT TGAAGGAAAA TGTTTTCAAA GGTGTGAGAAC CTGAAATGT 2820
 GAGATTGAT ATATCAGAGC AGTAATTAAT AAGAGAGCT GAGGTGAAAC TCGGTTTAAA 2880

30 Seq ID NO: C169 DNA Sequence
 Nucleic Acid Accession #: NM_003506.1
 Coding sequence: 259..2379

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 GCAGCTCCAG TCCCGGAGCG AACCCCGGAG CGTCTCAGG TCCCTGGGGG GAACGGTGGG 60
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 40 ATCAGGAAT TGAAGAAAT GGAGATGTT ACATTTTGT TGACGTGTAT TTTCTAACC 300
 CTCCTAAGAG GGCACAGTCT CTTCACTGT GAACCAATTA CTGTTCAGC ATGTATGAAA 360
 ATGGCCZACA ACATGACGTT TTTCCCTAAT CTGATGGGTC ATTATGACCA GAGTATTGCC 420
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 45 TGTCTGAAC TTTGTGAGAA AGTATATTCT GATTGCAAAA AATTAAATGA CACTTTTGGG 600
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 GCGGATAGCA CAGCCTGCAA TAAGGCAGAT GAGAAGCTAG AACTTGGTGA CACTGTGTCT 1080
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 55 GCTGGCCTG TGTGTTGGTT GATCTTACC ATFACITGGT TCTTAGCTGC AGGAAGAAAA 1200
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 65 GGAAGCAAAA AGCATGACAC AGAATGGGCT GGGTTTTTTA AACGAAATG CAAGAGAGAT 1800
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 70 ACATCAATGA GAGAGGTGAA AGCGGACGGA CTAGCACCTC CAGGTTTAA GGAACAGGAC 2100
 TGTGGTGAAC CTGCTCTGCC AGCAGCATCC ATCTCCAGAC TCTCTGGGGA ACAGGTGAC 2160
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 75 CAGAAGCAAA TTTGTGTTAC ACTGGAAGTG ACCTATGCAC TGTTTTGTAA GAATCACTGT 2460
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 80 CCTTTTCTAT TTTATGAGAT TCTACTCTTG GTAAGATAT TTTAAGATGT ACTATGCTAT 2700
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5
 TGTGATTTT ATAGTCTCGT TTTAGGAATT TCACAGATCT AAATTATGTA ACTGAAATAA 3060
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Seq ID NO: C170 DNA Sequence

10
 Nucleic Acid Accession #: NM_000582
 Coding sequence: 88-990

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Seq ID NO: C171 DNA Sequence

45
 Nucleic Acid Accession #: NM_002821
 Coding sequence: 150..3362

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 CCATTGTCTT CATCAAGCAG CCGTCTCTCC AGGATGCACT GCAGGGGCTC CCGGGCGCTG 300
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 TCCATGACGT GGCCTCTGAG GACTCAGGCC GCTACACCTG CATGCGAGGC AACAGCTGCA 2160
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 CCGCTGTGTC CTACATCAAT GCGCTGCTGG GCTCATGTT CTACTGCAAG AAGCGCTGCA 2340

5	AAGCCAAAGCG	GCTGCAGAAAG	CAGCCCGAGG	GC3AGGAGCC	AGAGATGGAA	TGCCTCAACG	2400
	GAGGGCCTTT	GCAGAACCGGG	CAGCCCTCAG	CAGAGATCCA	AGAAGAAGTG	GCCTTGACCA	2460
	GCTTGGGCTC	CGGCCCCCGG	GCCACCAACA	AACGCCACAG	CACAAGTGAT	AAGATGCAT	2520
	TCCCAAGGTC	TAGCCTGCAG	CCCATACCA	CCTCGGGGAA	GAGTGAGTTT	GGGGAGGTGT	2580
	TCTTGC AAA	GGCTCAGGCG	TGGAGGAGG	GAGTGGCAGA	GACCTGGTA	CTTGTGAAGA	2640
	GCCTGCAGAC	GAAGGATGAG	CAGCAGCAGC	TGGACTTCCG	GAGGAGTTTG	GAGATGTTTG	2700
	GGAGCTGAA	CCACGCCAAC	GTGGTGGCG	TCTTGGGCT	GTGCGGGAG	GCTGAGCCCG	2760
	ACTACATGGT	GCTGGAATAT	GTGGATCTGG	GAGACCTCAA	GCAGTTCTCT	AGGATTTCCA	2820
10	AGAGCAAGGA	TGAAAATTTG	AAGTCACAGC	CCTCAGCAC	CAGCAGAAAG	GTGGCCCTAT	2880
	GCACCCAGGT	AGCCCTGGGC	ATGGAGCACC	TGTCCAACAA	CCGCTTGTG	CATAAGGACT	2940
	TGGCTGCGCG	TAACTGCTTG	GTGAGTGCCC	AGAGACAAGT	GAAGGTGTCT	CCCCTGGGCG	3000
	TCAGCAAGGA	TGTGTACAAAC	AGTGAGTACT	ACCACCTCCG	CCAGGCTTGG	GTGCGCTGCG	3060
	GCTGGATGTC	CCCCGAGGCC	ATCCCTGAGG	GTGACTTCTC	TACCAAGTCT	GATGTCTGGG	3120
	CCTTCGGTGT	GCTGATGTGG	GAGTGTGTTA	CACATGGAGA	GATGCCCAT	GGTGGGCAGG	3180
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	GGCCCTCCTT	ATCAGGGACA	GCCAGCGCCC	TGGAGACAG	CACCGTGGAG	AGCAAGCCGT	3360
	GAGGAGGGAG	CCCGCTCAGG	ATGGCCTGGG	CAGGGGAGGA	CATCTCTAGA	GGGAAGCTCA	3420
20	CAGCATGATG	GGCCCAAGTC	CTGTCCCTCT	GGGCCCTGAG	GTGCCCTAGT	GCAACAGGCA	3480
	TGCTGAGGT	CTGAGCAGGG	CCTGGCCTTT	CCTCCTCTTC	CTCACCCCTCA	TCCTTTGGGA	3540
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25	AGGCTTGGGA	GGCCCTGAGT	TTGTGGGAG	TTCTTAATA	TTCTCAAGTT	CTGGGCACAC	3780
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	ACACAGCAAG	TGAGTCTCTC	CCACTCTGGG	CTTGTGCACA	CTGACCCAGA	CCCACGCTCT	3900
	CCCCACCTTT	CTCTCTTTTC	CTCATCTTAA	GTGCCCTGGA	GATGAAGGAG	TTTTTCAGGAG	3960
	CTTTTGACAC	TATATAAACCC	GGCCCTTTTG	TATGCACAC	GGGCGGCTTT	TATATGTAAT	4020
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	GCCATCCTTA	CCCCACACTT	TTATGTGTGT	CGTTTTTGT	TGTGTTGTGT	TTTTTGTTTT	4140
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Seq ID NO: C172 DNA Sequence

Nucleic Acid Accession #: NM_002309.2

Coding sequence: 65..673

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	TGGGGCGGGG	AGCCCCCTCG	CCATCACCCC	TGTCAAAGCC	ACCTGTGCCA	TACGCCACCC	180
	ATGTCAACAAC	AACCTCATGA	ACCAGATCAG	GAGCCAACTG	GCACAGCTCA	ATGGCAGTGC	240
	CAATGCCCTC	TTTATTTCTT	ATTACACAGC	CCAGGGGGAG	CGGTTCGCCA	ACAACCTGGA	300
45	CAAGCTATGT	GGCCCTCAAG	TGAAGGACTT	CCCGCCCTTC	CACGCCAAGG	GCACAGAGAA	360
	GGCCAAAGCTG	GTGGAGCTGT	ACCGCATAGT	CGTGTACCTT	GGCACCTCCC	TGGCAACAT	420
	CACCCGGGAC	CMAAGATCTT	TCAACCCGAG	TGCCCTCAGC	CTCCACAGCA	AGCTCAAGGC	480
	CACCCCGGAC	ATCCTCGCAG	GOCTCCITAG	CAACGTGCTG	TGCCGCTTGT	GCAGCAAGTA	540
	CCACGTGGGC	CACTGTGGAG	TGAACCTACG	CCCTGACACC	TGGGTAAAGG	ATGCTCTTCA	600
50	GAAGAAAGAG	GGCCCTGTCT	AACCTCTGGG	GAAGTATAAG	CAGATCATCG	CGGTGTTGGC	660
	CCAGGCCCTTC	TAGCAGGAGG	TCTTGAAGTG	TGCTGTGAAC	CGAGGATCTT	CAGGAGTTGG	720
	GTCCAGATGT	GGGGGCTGT	CCAAGGCTGG	CTGGGGCCCA	GGGCATCGCT	AAACCCAAAT	780
	GGGGGCTGCT	GGCAGACCCC	GAGGGTGCTT	GGCCAGTCCA	TCTCACTCTG	GGCTGGGCTG	840
	TGATGAAGCT	GACAGCAGTG	GAAACTTCCA	TAGGGAGGGA	GCTAGAAGAA	GGTGCCCTTT	900
55	CCTCTGGGCT	ATTGTGGACT	GGGAGGCTGG	GGCTGACTTT	CTGCCCTTAC	TTGTCCCTTT	960
	GGCCCTTTGC	TCACTTTGTG	CAGTGAACAA	ACTACACAAG	TCACTACAAA	GAGCCCTGAC	1020
	CACAGGGTGA	CACAGCAGGG	CCAGGGGAG	TGGACCAACC	CCAGCAAAAT	TATCACCATC	1080
	TGTGCCCTTG	CTGCCCTTTA	GGTTGGGACT	TAGGTGGGCC	AGAGGGGGCTA	GGATCCCAAA	1140
	GGACTCTCTG	TCCCTTAGAA	GTTTGATGAG	TGGAGATAG	AGAGGGGCTT	CTGGGATGGA	1200
60	AGGCTGTCTT	CTTTTGAAGA	TGATCAGAGA	ACTTGGGCAT	AGGAACAATC	TGGCAGAAAT	1260
	TTCCAGAAAG	AGGTCACTTG	GCATTGAGG	TCTTGGGGAG	GCAGAGAGCC	CACCTTCAGG	1320
	CCTGGGAAGG	AGACACTGGT	GAGGAGGAGA	GGCTTGGAAA	GCTTTGGTAG	GTTCCTTCGT	1380
	CTCTTCCCGG	TGATCTTCCC	TGCAGCCTGG	GATGGCCAGG	GTCTGATGGC	TGAACTGSCA	1440
	GCAGGGGTTT	GTGGAGGTGG	GTAGGGCAGG	GGCAGGTTCG	TAACTCAGGT	GCAGAGGTTT	1500
65	TGAGGGACCC	AGGCTCTTCC	TCTGGGTAAA	GCTCTGTAAG	AAAGGGGCTG	GGTAGCTCAG	1560
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	GGGACTTGG	GGCCGTCTCT	GGTCCCCAGG	GCAAGGGAAAC	AGCAGAACTT	AGGGTCAGGG	1680
	TCTCAGGGAA	CCCTGAGCTC	CAAGGCTGCT	GTGGCTCTGA	CTGGGCATGA	TTTCTATTTA	1740
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	GCTCCACCCC	CATCCCTTAC	TGTGACTTGC	TTTAGCGTGT	CAGGGTCCAG	GCTGCAGGGG	2040
	CTGGGCCAAT	TTGTGGAGAG	GCGGGGTGCC	TTTCTGTCTT	GCTTCCAGGG	GGCTGGTTCA	2100
75	CAGTGTCTTT	GGGGGCCCCA	GCATTTGTGT	GTGAGGGGCA	CTGTTCTCTG	CAGATATTGT	2160
	GGCCCTCTGA	GCAGTGGGCA	AGACAGTCTT	TGTGGCCAC	CGTGTCTCTT	TTTCTGTGTC	2220
	CCCATGTGTC	CTCTGAAATA	GCGCCCTGGA	ACAACCTTGC	CCCTGCACCC	AGCATGCTCC	2280
	GACACAGCAG	GGAGCTCTCT	CCGTGTGGCC	GGACACCCAT	AGACGGTGGG	GGGGGCTGGG	2340
	CTGGGCCAGA	CCCCAGGAAG	GTGGGGTAGA	CTGGGGGATG	CAGCTGCCCA	TTGCTCCCAA	2400
80	GAGGAGGAG	GGGAGGCTGC	AGACGCTCGG	GACTCAGACC	AGGAAGCTGT	GGGCTCTCTT	2460
	GCTCCACCCC	CATCCCATCT	CCACCCATGT	CTGGGCTCCC	AGGCAGGAAA	CCGATCTCTT	2520
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	AAGGAGGCG	CAGAGTTGGG	GCAGCTGCTC	AGAGCAGTGT	TCTGGCTTCT	TCTCAACCCC	2640
	TGAGCGGGCT	GCCGCGCTCC	AAGTTCTCTC	GACAAGATGA	TGGTACTAAT	TATGGTACTT	2700
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CTGGCTGCAT TCCCCAGGA TGGGCTTGA GAAAGACAAA CTGTCTGGA AACAGAGTT 3000
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Seq ID NO: C173 DNA Sequence
Nucleic Acid Accession #: XM_097508
Coding sequence: 44..2788

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TGGGAACCAT CTCTCACACA TCCAGGACA AGCATTTCTT GGTCTCTACA GCCTGAAAAA 240
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AGGGCAGCT GGCAGGGGAG ACCTCACAGA GAAAGGCTG GAAGGTGATT TCCGTGTGA 3180
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Seq ID NO: C174 DNA Sequence
Nucleic Acid Accession #: NM_130849

Coding sequence: 101..2044

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CTTTGTGTTT CAGCAGACAA GCAGCGAGGT CCTATGAGC CTGGCGGAGC TGTGAGCCTT 780
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GCAGACTGCG CTGGGCTGCA GGGGGGTGCG CCACTACATC CTGAGAGCCT TCTGAGCCT 1200
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Seq ID NO: C175 DNA Sequence

Nucleic Acid Accession #: NM_018971

Coding sequence: 1..1128

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GCAGGGCGCG GCGCGCGCGC GCGCGCGCTC CTGCTGCTGG AAGAATTCAA GACGGAGAAG 840
AGGCTGTGCA AGATGTTCTA CGCCCTCAGC CTGCTTCTTC TGCTCTCTG GGGGCGCTAC 900
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65 ACGGCTCGCG TGTGGCTGAC CTTCGCGCAG GCGCGCATCA ACCCGTCTGT GTGCTTCTTC 1020
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ACCACCCAGG CGACCCATCC CTGCGACCTG AAGGCGATTG GTTTATGA 1128

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Seq ID NO: C176 DNA Sequence

Nucleic Acid Accession #: NM_005631

Coding sequence: 290..2653

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ACAGTTCGCC TGAGCTGCTT CCGCGCGCGC CGAGGTCGTG CGTGTGGCGG GGGGCTTCGG 240
AGGAGCAGCG AGGGGCGCGC GCGCTTTTTC TGAGTGGGCG GGTGTGGCCA TGGCCGCTGC 300
CGCGCCAGCG CCGGGGCGCG AGCTTCCGCT CCTGGGCTG CTGCTGCTGC TGTGCTGGG 360
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GGGCGGGAGC GCGAGGAGGA GCGCGCGCTG GACTGGCCCT CCGCGCGCGC TGAGCCACTG 480
CGGCGGGGCT GCGCCCTGCG AGCGGCTGCG CTACACGCTG TGCTTGGGCT GGTGCTGCTC 540
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Seq ID NO: C177 DNA Sequence
Nucleic Acid Accession #: AK094595
Coding sequence: 1..2853

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Nucleic Acid Accession #: NM_004625
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Seq ID NO: C179 DNA Sequence OBR3
Nucleic Acid Accession #: NM_003786
Coding sequence: 71..4654

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70	CCGAGGCTTG	CTCCGCAAGA	GGCGATCCCT	GGTTTTAGAC	GAGGCCACAG	CTGCCATGGA	4440
	CCTGGGACTC	GACAACCTCA	TCCAGGCTAC	CATCCGACCC	CAGTTTGATA	CCTGCACTGT	4500
	CCTGACATC	GCACACCGGC	TTRACACTAT	CATGCACTAC	ACCAGGGTCC	TGGTCTCTGA	4560
	CARAAGAGTA	GTAGCTGAAT	TTGATTCTCC	AGCCAACTCC	ATTGCACTTA	GAGGCATCTT	4620
	CTACGGGATG	GGCAGAGATG	CTGGACTTGC	CTAAATATA	TTCTTGAGAT	TTCTCTCTGG	4680
75	CCTTCTCTGG	TTTCTCATAG	GAAGGAAATG	ACAACCAATA	TGTCCGCGAGA	ATGGACTTGA	4740
	TAGCAAAACAC	TGGGGGCAAC	TTAAGATTTT	GCACCTGTAA	AGTGCCTTAC	AGGGTAACCTG	4800
	TGCTGAATGC	TTTGAATGAG	GAAATGATCC	CCAAGTGGTG	AATGACACGC	CTAAGGTCTAC	4860
	AGCTAGTTTG	AGCCAGTTAG	ACTAGTCCCC	CGGTCTCCCG	ATTCCCAACT	GAGTGTATT	4920
	TGCACACTGC	ACTGTTTCTA	AATAACBATT	TTATGAAATG	ACCTCTGTCC	TCCCTCTGAT	4980
80	TTTCTCATAT	TTCCATAAGT	TTCTTTCTG	TTTTTAATA	AAAAGCTTTT	TCCTCTCTGA	5040
	ACAGAAAGCA	GCCTCTGGGT	CAGGCCACCC	CTAGGAACCT	AGTCTGTGAC	TCTGGGGTGC	5100
	TGCTTGAATC	CATTAAATAT	GGGAGTACTG	ATGAATATAA	ACTACATGGT	CAACAGTAAA	5160
	AAAAAAAAAA	AAAAAA					5176

Seq ID NO: C180 DNA Sequence

Nucleic Acid Accession #: NM_004626
Coding sequence: 124..1188

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5      1      11      21      31      41      51
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      TAACCCGCGC CCTCCGCTCT CCCC GGCTGC AGGCGGCGTG CAGGACCAGC GGCGGCGGTG 60
      CAGGCGGAGG ACITCGGCGC GGTCTCTCT GGGTGTGACC CCGGGCGCGC CCGCGCGCGG 120
      ACATGAGAGG CGCGCGCGCA GGTCTGCGAG GCGCTGCTCT TCGCCCTGGC GCTCCAGACC 180
      GGCGTGTGCT ATGCGATCAA GTGGCTGGCG CTGTCCAAGA CACCATCGGC CCTGGCACTG 240
10     AACGAGAGCG AACACTGCAG GCAGCTGGAG GGTCTGGTGT CTGCACAGGT GCAGCTGTGC 300
      CGCAGCAACC TGGAGCTCAT GCACACGCTG GTGCACGCGG CCCGCGAGGT CATGAAGGCC 360
      TGTGCGCGGG CCTTGGCGGA CATGCGCTGG AACTGCTCCT CCATGTAGCT CGCCCCAAC 420
      TATTGTCTTG ACCTGGAGAG AGGAGCCCGG GAGTGGCGCT TCGTGTATGC GCTGTGCGGC 480
      GCGCGCATCA GCCAGGCCAT CGCGCGGGCC TGCACTCGG GCGACCTGCC CGCTGCTCC 540
15     TCGCGCCCGG TCCAGGTGTA GCCACCGCGG CCGGGGAACC GCTGGGGAGG ATGTGCGGAC 600
      AACCTCAGCT ACGGGCTCCT CATGGGGGCC AAGTTTTCGG ATGCTCTTAT GAAGGTGAAA 660
      AAAACAGGAT CCAAGCCCAA TAAACTGATG CGTCTACACA ACAGTGAAGT GGGGAGACAG 720
      GCTCTGCGCG CCTCTCTGGA AATGAAGTGT AAGTGCCATG GGGTGTCTGG CTCTGTCTCC 780
      ATCCGCACCT GCTGGAAGCG GCTGCAGGAG CTGCAGGATG TGGCTGCTGA CCTCAAGACC 840
20     CGATACCTGT CGGCCACCAA GGTAGTGCAC CGACCCATGG GCACCGCAA GCACCTGGTG 900
      CCCAAGGACC TGGATATCCG GCTTGTGAAG GACTCGGAAC TCGTCTATCT GCAGAGCTCA 960
      CCTGACTTCT CATTGGCGGA TGAGAAGGTG GGCTCCACG GGACACAAGA CAGCGAGTGC 1020
      AACAGACAT CCACCGGAGG CGACAGCTGC GACTTATGT GCTGCGGGCG TGGCTACAC 1080
      CCTACACAG ACCCGGTGGT CGAGCGGTGC CACTGTAAAT ACCACTGGTG CTGCTAGTTC 1140
25     ACCTGGCGCA GGTGTGAGCG TACCGTGGAG CGCTATGTCT GCAAGTGAGG CCTGCGCTC 1200
      CGCCCCACGC AGGAGCGAGG ACTCTGTCTA AGGACCCCA GCAACTGGGG CCAGGGGCC 1260
      GGAGACATCT CATGGAGCTC TGGTGTGAAA TTCCAGATGC CAGGCATGGG AGCGCGCTTG 1320
      TGCCTTGCCT TCACTTGAAA GCCACCGGGA ACAGAAGGTC TGGCCACCGT GGAAGGAGGG 1380
      CAGGACATCA AAGGAACCGG ACAAGATTAA AAATAACTTG GCAGCGTAGG GCTCTGAGT 1440
30     GCGCCACAGC TGGTGTAAAG AGCGGGGCTT GGGATCGGTG AGACTGTATC AGACTTGACC 1500
      TTTCAAGGCC ACAGAGACCA GCCTCCGGGA AGGGGTCTGC CGGCTTCTT CAGAAATGTC 1560
      TGGCGGACCC CTGGCCACAC CTGGGGTCTT GAGCCTGCTG GCGCCACAC ATGGAATCAC 1620
      TAGCTTGGGT TGTAAATGTT TTCTTTTGT TTGTGCTTT TCTTCTTTT GATGTGTGAA 1680
      GCTACAGAAA TATTTATAAA ACATAGCTTT TTCTTTGGGG TGGCACTTCT CAATTCCTCT 1740
35     TTATATATTT TATATATATA AATATATATG TATATATATA ATGATCTCTA TTTTAAACT 1800
      AGCTTTTAA GCAGCTGTAT GAATAAAYG CTGAGTGAGC CCCAGCCCGC CCCTGCAGTT 1860
      CCGCGCTCG TCAAGTGAA TCGGCAGACC CTGGGGCTGG CAGAGGGAGC TCTCCAGTTT 1920
      CCAGGCA 1927

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Seq ID NO: C181 DNA Sequence
Nucleic Acid Accession #: NM_031866
Coding sequence: 6..2090

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45     1      11      21      31      41      51
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      ACAGCATGGA GTGGGGTTAC CTGTTGGAAG TGACCTCGCT GCTGGCGCGC TTGGCGCTGC 60
      TGACGCTCTC TAGCGCGGCT GCGGCGCGCT CGGCCAAGGA GCTGGCATGC CAAGAGATCA 120
      CCGTGCGGCT GTGTAAAGGC ATCGGCTACA ACTACACCTA CATGCCAAT CAGTTCAACC 180
      ACACACGCA AGACGAGGCG GGCTTGGAGG TGACCAAGTT CTGGCGCTG GTGGAGATCC 240
50     AGTGTGCGCC CGATCTCAAG TTCTTCTGT CTGAGCATGA CAGCGCCATC TGCTAGAGG 300
      ACTACAGAA GCGGCTGCGG CCCTGCGGCT CGGTGTGCGA GCGGCGGAG GCGGCTGCG 360
      CGCGCTCAT GCGCCAGTAC GGTCTGCGCT GCGCGGACG CATGCGCTG GACGCGCTGC 420
      CGAGCAGAG CAACCTTAC ACCTGTGCA TGGACTCAA CCGCACCGAG CTACCCACCG 480
      CCGCGCCAG CCGCTGCGG CCGCTGCGG CCGCGCGCG CCGCGGAGC CCGCTTGG 540
55     GCAGCGCGCA CCGCGCGCG CCGGGGCGCA GCGCCCGCA CCGCGGAGG GCGAGGGCG 600
      GTGCGCGCGG GAGCGCGCG GCGCCCGCG CTGCGCGCG CCGCGGTGG GGAAGGGCG 660
      GCGCGCTGCG GCGCGCGCG GCTCTCTGCG AGCGCGGGTG CCAAGTCCCG GCGCTATGG 720
      TGAGCGGTG CAGCGAGCG CACCCCTCT ACAACCGGT CAGACAGGC CAGATCGCTA 780
      ACTGCGGCT CCGCTGCGG AACCCCTTT TCAGCCAGGA CAGCGCGCG TTCAACGCT 840
60     TCTGGATCGG CTGTGCTGCG GTGCTGCTG TCGTGTCCAC CTTCGCCACC GTCTCCACCT 900
      TCTTATGCA CATGAGCGC TTCAAATACC CGAGCGGCG CATTAATCT CTCTCGGCT 960
      GCTACCTCTT CGTGTGCGTG GGCTACCTAG TGCGCTGGT GCGCGGCCAC GAGAAGGTG 1020
      CCGTGCAGCG TGGCGCGCG GCGCGCGGG CGCTGCGGG CCGCGCGCG GCGCGCGCG 1080
      GCGCGCGCG GCGCGCGCG GCGCGCGCG GCGCGCGCG GCGCGCGCG TACGAGGAGC 1140
65     TGGCGCGGT GAGCAGCAG GTGCGTACG AGACACCGG CCGCGCGCTG TGCAACGTGG 1200
      TCTTCTGCT GTCTACTTC TTGCGCATG CAGCTCCAT CTGGTGGTG ATCTGTGCG 1260
      TCACATGTTT CCGCGCGCG GGTATGAAGT GGGCAACGA AGCCATCGC GGCTACTCG 1320
      AGTACTTCCA CCGCGCGCG TGGCTTGTG CCGCGCTCA GTCCATCGG GTGCTGGCG 1380
      TCAGCTCGT GAGCGCGGAC CCGGTGGCG GCATCTGCTA CCGTGGCAAC CAGAGCCTG 1440
70     ACAACCTGCG CGCTTCTGT CTGGCGCGG TGCTCATCTA CCTCTTCAT GGCACCATG 1500
      TCGTGTGCG CGCTTCTGT TCCCTGTTCC GCATCGCTC GGTCTATCA CACAGGAG 1560
      GCGCCACCAA CTGAGCAAG CTGAGAGAG CTGATGTCG CCGGGCGCT TTCAACGTG 1620
      TCTACACCGT GCGCGCGCG GTGGTGTGCT CCGCTCTCT CTACGAGCAG CACACCGCG 1680
      CGCGCTGGGA GCGCTGCGG AACTGCGCGT GCTGCGGGA CCGTGCAGCC GACCGAGC 1740
75     GCAGCGCGCA CTACGCGCT TTCTGCTCA AGTACTTCT GTGCTAGTG GTGGGATCA 1800
      CCGCGCGGT GTGGTCTG TCGCGCAGA CCGTGGAGT CTGGCGCTC CTGTGACCC 1860
      GCTGTGCTG GCGCGCAAG GCGCGCGCG TGGCGGGGG CCGCGCGCG ACCGCGCGG 1920
      GGGTGGCGG GCGCGCGCG GCGCGCGCG GCGCGGAGC CCGCGCGCG GGGGGCGCG 1980
      GCGCGCGCG GCGCTCTCT TACAGCAGC TCAGCACTGG CCGTACCTG CCGTGGCG 2040
80     CGCGAGCTC CGTGTCTAT CCAAGCAGA TGCCATGTC CAGGCTCTG GCGGAGGGA 2100
      GGGGCGCGC AGAGGGGTG GAGAGGGGTG CGAGGAGAC CAAGTGCAGC GAAGGAGAC 2160
      TGTATGGGCT GAGGTTCCCA CCCCTTCACA GTGTGATTG CTATTAGCAT GATAATGAA 2220
      TCTTAATGTT ATCCATTAGC TGGGACTTAA ATGACTCACT TAGAACAAAG TACCTGGCAT 2280
      TGAAGCCTCC CAGACCCAGC CCCTTTTCT CCATTGATG GCGGGGAGT CCGCGCGCA 2340

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5
 10
 15

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CGCGTTAATT TCTGTGGCT GAGGAGGGTG GACTCIGCGG CGTITCCAGA ACCCGAGATT 2400
TGGAGCCCTC CCTGCTGCA CTGGCTGGG TTGCGAGTCA GATACACAGA TTTCACCTGG 2460
GAGAACCTCT TTTCTCCCT CGACTCTTCC TACGTAAACT CCCACCCCTG ACTTACCCCTG 2520
GAGGAGGGGT GACGCCCACC TGATGGGATT GCAGGTTTG GGTATTCTTA ATGACCCAGG 2580
AAATGCCTTA AGTAAACAAA CAAGAAATGT CTAAATTATA CACCCACCGT AAATACGGGT 2640
TTCTTACATT AGAGGATGTA TTTATATAAT TATTTGTTAA ATTGTAAAAA AAAAAAGTGT 2700
AAAAATGTA TATATCCAAA GATATAGTGT GTACATTTTT TTGTAAAAAG TTTAGAGGCT 2760
TACCCCTGTA AGAACAGATA TAAGTATTCI AITTTGTCAA TAAATGACT TTGTATAAAT 2820
GATTTAACCA TTGCCCTCTC CCCCCTCTCT TCTGAGCTGT CACCTTAAA GTGCTTGCTA 2880
AGGAGCCTG GGGAAAAATG ACATTTTCTG GCTTGTCTAT CTGTACACTG ACCTTAGGCA 2940
TGGAGAAAAAT TACTTGTATA ACTCTAGTTC TTAAGTTGTT AGCCAAGTAA ATATCATTGT 3000
TGAACGTAAA TCAAAATGTA GTTTTTCGAC CTCCCCAAA GACGCTGTTT TTCATGGGAG 3060
CTCTTTCTG ATCCATGGAT AACAACTCTC ACTTTAGTGG ATGTAAATGG AACTTCTGCA 3120
AGGCACTAAT TCCCCTTAGG CTTTGTATT TATCTGTCAT GGTATCACTA AAGGTTTCAA 3180
AACCCTGAAA AAAAA
  
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Seq ID NO: C182 DNA Sequence
 Nucleic Acid Accession #: XM_050625
 Coding sequence: 222..1109

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1 11 21 31 41 51
CGGGGTGCGA GCCCCCCGGA GCTGCGCGCG GGCTTGCAGC GCCTGCGCCG CGCTGTCTCT 60
CGGGGTGCCC GCTTCTCCGC GCCCAGCGCG CCGGCTGCCA GCTTTTCGGG GCCCCGAGTC 120
GCACCCAGCG AAGAGAGCGG GCCCGGAGCA AGCTCGAACT CCGGCCGCGT GCCTCTTCCC 180
CGCTCCGCTT CCTCTGCCCC CTTGCGGGTC GCGCGCCACG GATGCTGCGG GCGCTTGGCT 240
CGCTGCTGCT GCTCTTCTCT GCTTGCAGCT GCTGCTTGGG CTGCGCGCGC GGGCTCTTCC 300
TCTTTGSCCA GCCCGACTTC TCTTACAAGC GCAGCAATTC CAAGCCCATC CTGTCCCAAC 360
TGCAGCTGTG CCAAGGCATC GAATACAGCA ACATGCGGCT GCCCAACTG CTGGGCCACG 420
AGACCATGAA GAGAGTCTGT GAGCAGGCGG GCGCTTGGAT CCGCTCTGTC ATGAAGCAGT 480
GCCACCCGGA CACCAAGAGG TTCTGTGCT CCGCTCTGCG CCGCTCTGCG CTGATGACC 540
TAGACGAGAC CATCCAGCCA TGCCACTGCG TCTGCGTCCA GTTGAAGGAC CGCTGCGCCC 600
CGCTCATGTC GCGCTTGGCG TTCCCTTGGC CCGCATGCT TGAAGTGCAC GCTTTTCCCC 660
AGGACAACGA CCTTGTGATC CCGCTGCTA GCAGCGACCA CCTCTGCCA GCCACCGAGG 720
AAGCTCCAAA GGTATGTGAA GCCTGCAGAA ATAAATATGA TGTGACAAAC GACATAATGG 780
AAACCTTTG TAAAAATGAT TTGCACTGA AAATAAAGT GAAGGAGATA ACCTACATCA 840
ACCGAGATAC CAAATCATC CTGGAGACCA AGAGCAAGAC CATTTACAAG CTGAACCGTG 900
TGTCGAAAG GGAAGCTAAG AAATCGGTGC TGTGCTCAA AGACAGCTTG CAGTGCACTT 960
GTGAGGAGAT GAACGATC AACGCGCCCT ATCTGTGCTAT GGGACAGAAA CAGGGTGGGG 1020
AGCTGGTAT CACCTCGGTG AAGCGGTGGC AGAAGGGGCA GAGAGAGTTC AAGCGCATCT 1080
CCCGCAGCAT CCGCAAGCTG CAGTGCTAGT CCGCGCATCC TGATGGCTCC GACAGGCTTG 1140
CTCCAGAGCA CGGCTGACCA TTCTGCTCC GGGATCTCAG CTCCCGTTC CCAAGCACAC 1200
TCCTAGCTGC TCCAGTCTCA GCTTGGGCG CTTCCCTCTG CTTTGTGAC GTTGTGATCC 1260
CCAGCATTTT CTGAGTTATA AGGCCACAG AGTGTATAGC TGTTTTCACC TAAAGGAAAA 1320
GCCACCCGGA ATCTGTAGA AATATTCAA CTAATAAAT CATGAATATT TTTATGAAGT 1380
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Seq ID NO: C183 DNA Sequence
 Nucleic Acid Accession #: NM_001306.1
 Coding sequence: 199..861

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 75

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CGCGCGCGCG TCGGTGAGTC AGTCCGTCCG TCCGTCGCTC CBTGGGGGCG CCGCAGCTCC 120
CGCCAGGCCC AGCGGCCCCG GCCCTCTGTC TCCCGCAACC CGGAGCCACC CGTGGAGCG 180
GGCTTGTCCG CGGCGACCAT GTCCATGGGC CTGGAGATCA CCGGCACCGC GCTGGCCGTG 240
CTGGGCTGGC TGGGCACCAT CGTGTGCTGC GCGTGGCCA TGTGGCGCGT GTGCGCCTTC 300
ATCGGCAGCA ACATCATCAC GTGCGAGAAC ATCTGGGAGG GCCTGTGGAT GAACTGCGTG 360
GTGCGAGCA CCGGCCAGAT GCAGTGCAAG GTGTACGACT CGCTGTGGC ACTGCCACAG 420
GACCTTCAGG CCGCCCGCGC CCTCATGCTG GTGCGCATCC TGTGCGCCCG CTTGGGCTG 480
CTAGTGGCGC TGGTGGGCGC CCAGTGCACC AACTGCGTGC AGGACGACAC GGCCAAAGCC 540
AAGATCAACA TCGTGGCAGG CGTGTGCTTC CTCTCGCGC CCTGTCTCAC CCTCGTGGC 600
GTGTCTTGGT CCGCCACAC CATTTATCCG GACTTCTACA ACCTCGTGGT GCCCGAGGCG 660
CAGAGCGCGC AGATGGGCGC GGGCTGTGAT GTGGGCTGGG CCGCGCGGCG CTTGCGAGCTG 720
CTGGGGGCGC CGTGTCTGTC CTGCTGTGTT CCCCCACGCG AGAAGAACTA CACGGCCACC 780
AAGGTCTGCT ACTCCGCGCC GCGCTCCACC GCGCCGAGAG CCAGCTTGGG CACAGGCTAC 840
GACCGCAAGG ACTACGTTA AGGACAGAC GCAGGAGAC CCGCCACCA CACCCACAC 900
CAACACCAAC ACCACCAACG CAGCTGGAG CGCGACCAAG GGCATCCAGC GTGCGGCTT 960
GCCTCGGAGG CAGCGCACCC CCGAGAGCC AGGAAGCCCC CGCTCTGGAC TGGGGCAGCT 1020
TCCCGAGCAG CCGCGCTTT GCGGGCCGGG CAGTGCACCT CCGGGGCCAG GGAACCACT 1080
GCATGAGCTG TGAACCTCA CCTTCTGGA GCAAGGGGTC TGGGTGACCG CCAATACCTG 1140
ACCAACCGGT CAGCGCCAT CCGGCCGCTG CCCCCATGTC GCGCTGGGCA GGAACGGCA 1200
GCCCAGGAG GGGCACTGA TATTTTCAA TAAAGGCTC TCGTTTAGC 1260
  
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Seq ID NO: C184 DNA Sequence
 Nucleic Acid Accession #: NM_012449.1
 Coding sequence: 66..1085

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1 11 21 31 41 51
CGGAGACTCA CGGTCAAGCT AAGGCGAAGA GTGGGTGGCT GAAGCCATAC TATTTATAG 60
AATTAATGGA AAGCAGAAAA GACATCACAA ACCAAGAAGA ACTTTGGAAA ATGAAGCCTA 120
GGAGAAATTT AGAAGAAGAC GATTATTTGC ATAAGGACAC GGGAGAGACC AGCATGCTAA 180
  
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5	AAAGACCTGT	GCTTTTGCAT	TTGCACCAA	CAGCCCATGC	TGATGAATTT	GACTGCCCTT	240
	CAGAACTTCA	GCACACACAG	GAACCTCTTC	CACAGTGGCA	CTTGCCCAATT	AAAATAGCTG	300
	CTATTATAGC	ATCTCTGACT	TTTCTTTACA	CTCTTCTGAG	GGAGTAATTT	CACCCCTTAG	360
	CAACTTCCCA	TCAACAATAT	TTTATAAAA	TTCCAATCCT	GGTCATCAAC	AAAGTCTTGC	420
	CAATGGTTTC	CATCACTCTC	TTGGCATTGG	TTTACCTGCC	AGGTGTGATA	GCAGCAATTG	480
	TCCAACCTCA	TAATGGAACC	AAGTATAAGA	AGTTTCCACA	TTGGTTGGAT	AAGTGGATGT	540
	TAACAAGAAA	GCAGTTTGGG	CTTCTCAGTT	TCCTTTTTCG	TGTACTGCAT	GCAATTTATA	600
	GTCTGTCTTA	CCCAATGAGG	CGATCCTPAC	GATACAAGTT	CTTAACTGG	GCATATCAAC	660
10	AGGTCCAACA	AAATAAAGAA	GATGCCCTGA	TTGAGCATGA	TGTTTGGAGA	ATGAGATTTT	720
	ATGTGTCTCT	GGGAATTTGT	GGATTTGGCA	TACTGGCTCT	GTGGCTGTG	ACATCTATTG	780
	CATCTGTGAG	TGACTCTTTG	ACATGGAGAG	AATTTCACFA	TATTCAAGAC	AAGCTAGGAA	840
	TTGTTTCCCT	TCTACTGGGC	ACAATACAGG	CATTGATTTT	TGCCTGGAA	AAGTGGATAG	900
	ATATAAACA	ATTGTATGAG	TATACACCTC	CAACTTTTAT	GATAGCTGTT	TTCTTCCAA	960
15	TTGTGTCTCT	GATATTAAAA	AGCATACTAT	TCCTGCCATG	CTTGAGGAAG	AAGATACTGA	1020
	AGATTAGACA	TGGTTGGGAA	GACGTACCCA	AAATTAACAA	AACTGAGATA	TGTTCCCACT	1080
	TGTAGAATTA	CIGTTTACAC	ACATTTTGTG	TCAATATTGA	TATATTTTAT	CACCAACATT	1140
	TCAAGTTTGT	ATTTGTTAAT	AAAATGATTA	TTCAAGGAAA	AAAAAAAAAA	AAAAA	1195

Seq ID NO: C185 DNA Sequence
Nucleic Acid Accession #: NM_001775.1
Coding sequence: 70..972

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	CTAAAGCTCT	CTTGCTGCCT	AGCCTCCTGC	CGGCTCTATC	TTGCCCCAGC	CAACCCCGCC	60
	TGGAGCCCTA	TGGCCAACTG	CGAGTTCAGC	CCGGTGTCCG	GGGACAAACC	CTGCTGCCGG	120
	CTCTCTAGGA	GAGCCCAACT	CTGTCTTGGC	GTCACTATCC	TGGTCTGTAT	CCTGTGTGTG	180
	GTGCTCCGGG	TGGTCTTCCC	GAGGTGGGCG	CAGACGTGGA	GCGGTCCGGG	CACCAACAAG	240
30	CGCTTTCCCG	AGACCGTCTC	GGCGCGATGC	GTCAAGTACA	CTGAATTTC	TCCTTGAGATG	300
	AGACATGTAG	ACTGCCAAGG	TGTATGGGAT	GCTTTCAGGG	GTGCATTAT	TTCAAAACAT	360
	CCTTGCAACA	TACTCTGAAG	AGACTATCAG	CCACTAATGA	AGTTGGGAAC	TCAGACCGTA	420
	CCTTGCAACA	AGATTCTTCT	TTGGAGCAGA	ATAAAGATC	TGGCCCATCA	GTTCAACAG	480
	GTCCAGCGGG	ACATGTTTAC	CCTGGAGGAC	ACGCTGCTAG	GCTACCTTGC	TGATGACCTC	540
35	ACATGGTGTG	GTGAATTCAA	CACCTCCAAA	ATAAACTATC	AATCTTGCCC	AGACTGGAGA	600
	AAGBACTGCA	GCACAACCC	TGTTTCAGTA	TTCTGGAAAA	CGGTTCCTCG	CAGGTTTGCA	660
	GAGCTGCTCT	GGAATGTGGT	CCATGTGATG	CTCAATGGAT	CCGSCAGTAA	AATCTTTGAC	720
	AAAAACAGCA	CTTTTGGGAG	TGTGGAGTTC	CATAATTTCG	AACCAGAGAA	GGTTTCAGACA	780
	CTAGAGGCTT	GGTGTATACA	TGTGTGAAGA	GAGATTTCGA	GAGACTTATG	CCAGGATCCC	840
40	ACCATAAAGG	AGCTGGGAATC	GATTATTAAG	AAAAGGAATA	TTCAATTTTC	CTGCAAGRA	900
	ATCTACAGAC	CTGACAGATT	TCTTCAGTGT	GTGAAAAATC	CTGAGGATTC	ATCTTGACAA	960
	TCTGAGATCT	GAGCCAGTGT	CTGTGTTTGT	TTTAGCTCCT	TGACTCTCTG	TGGTTTATGT	1020
	CATCATACAT	GACTCAGCAT	ACCTGCTGCT	GCAGAGCTGA	AGATTTTGGG	GGGTCTCTCA	1080
	CAATAAGGTC	AATGCCAGAG	ACGGAAGCCT	TTTTCCCCAA	AGTCTTAAAA	TAACCTTATAT	1140
45	CATCAGCAT	CTTTTATTGT	GATCTATCAA	TAGTCAAGAA	AAATATTGTG	ATAAGATTAG	1200
	AATGAARATT	GTATGTTAAG	TTACTTCTCT	TAG			1233

Seq ID NO: C186 DNA Sequence
Nucleic Acid Accession #: XM_120513.2
Coding sequence: 1..2208

50	1	11	21	31	41	51	
	ATGGTGTTCAT	GCACGTTTCT	GGGGCCCCCTA	CGGGAAACAA	ATGAAAACGT	GAAAAAGTTC	60
55	TACGCTTTGC	GAGCTTTTAT	GTTCGCTATG	AGCTCAGAGG	CCGCGATGCT	CGGGGAAAGC	120
	AGGACCCCAA	AGCCCCGTAA	ACACCGCGCG	ACCCACCGGG	CCAAGATCTT	CAAGAGGTTT	180
	TTTTCAGAA	GATCGGAGAG	CAATTCCCGA	TTGGTAGAAG	AACCTTGTCT	ATACACACG	240
	TACTCTGACG	ACCCCGCCCC	AACGACTAGC	CCCTCCTCTG	TGCAACCCCG	AGAGTTTGGG	300
	GTCACTGACG	GGGCGCCACG	AGCTCGTTTC	GGAAAGCCGA	CCCGGCCCGC	AGCCGACAGAA	360
60	GCCTCGAGTC	CAATCTTGGG	CACTTGGCGAG	GCAGCTGTTC	AATCAGGAGC	TGCGGCGGCA	420
	GCCCCCCTCG	CGGGGGCTCG	GCGATGCCAG	CCTCAGCGAC	AGGCGCGCGC	GGCGCGCGCC	480
	ACGGCACAGA	CACACACCTT	CCCAACGCGG	CHCACAGGG	CAGACCTCGC	GGGACGGCGG	540
	CGGAGGCACC	CTCGAGCCCC	GGCGCCCGGC	GGGGAGGGGA	CGTGTCTCGA	GGGACCGGCC	600
	CCBAGGCGCC	GGATGGAGGA	AGAGATGCAG	CCGCGCAGAG	AGGGGCCCCG	CTTCCCTAAA	660
65	ATCTACAGCG	AGCGCAGCCC	CTACAGCGTC	CTCAAGACGT	TCCCTCAGCA	GAGACCGGCG	720
	CTGGCCAAAG	GCTACGAGCG	ACCCACCTCG	GTGGAGCTGC	CGCACCGCCA	CTTGAGGACT	780
	CGCGCGCAGC	CGCGCCCGGC	GTCCCGCGCC	GCCTCTCTGT	CGTCTTGTGT	CGCGCTGTCT	840
	GTTCAGATCG	GGGTCTCTCC	GCGTCCGCCA	CGCGGTGGAT	TTGCGGCGCG	GGGAACCATC	900
	CGCGCCCTCC	TTCTGTCCCC	GGGAGTCCGA	GGCACTCTGC	TCCACCTGCT	CACCTGTGTG	960
70	TTCCCGCCAT	CCCTCTGTCC	CCGTCTGTGG	CACTGTGCGG	CGCGCGCGGG	AGGGACCTCA	1020
	CATACACATA	TGTGGAGGTC	CCAGTCCACA	CTTCCAGGAT	CTGACACCAT	GGTCTCTGTC	1080
	TTTGGATTGA	TGGCTCAGAG	AAGATGGCAG	CATAGATCTT	TAAAGCAGTT	TGAGTGGGGA	1140
	ATTCTTGGAT	CTTGGGGTAC	TTGGCCATGT	GGACAGGATT	GGCTGGAGAA	GGAGGTCAG	1200
	GTGGCGGTCC	TGCTGCCAAG	GTCTGAGGGT	AACTACTGCT	CTAGAGAGAG	TGGAATGATC	1260
75	TTGGATGCTT	TGGCCACAGA	GTGCACTGGA	GTCTTATGCC	TCTTAAATTG	TGGAGGAAAA	1320
	CTCCTGACTT	CCAACCATTC	TCACTCCATG	ATTCTTGTGG	TAAAGCAGGA	AGGCTCAAGT	1380
	TACACGAAAA	CGGACGAGCA	CTGTCAATTT	GGGAAAGGGG	TCCACAGTCA	GACCTCAGAC	1440
	AATGTAGACA	TAGAGATGCA	GTATATGCAG	AGGAAACAA	AACTCTCTGC	CTTTTGTAGG	1500
	GTTTTACATG	ACTCTCTACA	AAATTACCTG	CTCTCGGGAA	GCTTTCCAAC	TCCAAACCCC	1560
80	GTGTAGCTCA	GTGATATGCG	CCATCTGGCC	GACCTGGATC	CTCTGTCAAC	CTCTCTGTGG	1620
	CATACATTAG	AAATATTATC	ACTTGTATTC	ACAGCTTCCC	TGTGTAAATC	TAGGCATCTA	1680
	TCAGAGAGCG	CCCCGATCAA	GAGTGAATTT	CCAAATCCTT	TGCAGCAGGC	CTTGGCTGGG	1740
	GGTGTCTCAA	GACCAATTTT	AGGGGCACAG	CAAGCATCG	CTTACAGGGT	GAACTCTGAA	1800
	CTTGAGGATG	GCATCCGCGG	CCCCGTCCCT	TTGAGTTGTG	AGGCGCTTGA	AATGGATTGG	1860
	ACCTCCTTGG	GAAGCAAGCA	GCTGTGGAAC	AACATCTCTG	TCTACATAAC	GAGCAACAG	1920

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Seq ID NO: C187 DNA Sequence

Nucleic Acid Accession #: AB037745.1

Coding sequence: 26..1744

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Seq ID NO: C188 DNA Sequence

Nucleic Acid Accession #: NM_014324.1

Coding sequence: 89..1237

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Seq ID NO: C189 DNA Sequence

Nucleic Acid Accession #: XM_091332.1

Coding sequence: 1..1401

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Seq ID NO: C190 DNA Sequence
 Nucleic Acid Accession #: XM_054869.2
 Coding sequence: 26..2902

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Nucleic Acid Accession #: NM_006549.2
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80	TTCTGCTATG	CTGCTGGCAT	ATATCTGCTG	TACATCATCT	GCTTCACCAT	GTGCTGCATC	1260
	TACCGCCCCC	TCAAGCCAG	GACCAATAAC	CGCAGAGGCC	CCCGGACCAA	CACCTCTPTA	1320
	CAGCAGAGGC	TACTTCAGGA	AGCCTACATG	ACCCCTAAGG	ACGATATCCG	GCTGGTCCGG	1380
	GAGCTGGTGA	CTGTCTATGG	GGCTATCATC	ATCTGCTGGG	TAGAGGTTCC	AGACATCTTC	1440
	AGAAATGGGG	TCACTCGCTT	CTTTGGACAG	ACCATCTTGG	GGGGCCCAT	CCATGTCTCT	1500

5 ATCATCAOCT ATGCCTTCAT GGTGCTGGTG ACCATGGTGA TGGGCTCAT CAGTGCCAGC 1560
 GGGGAGGTGG TACCATGCTC CTITGCACTC GTGCTGGGCT GGTGCAACGT CATGTACTTC 1620
 GCCGAGAGAT TCCAGATGCT AGGCCCTTC ACCATCATGA TTCAGAAAGT GATTTTGGC 1680
 GACCTGATGC GATTCTGCTG GCTGATGGCT GTGGTCATCC TGGGCTTTCG TTCAGCCTTC 1740
 TATATCATCT TCCAGACAGA GGACCCCGAG GAGCTAGGCC ACTTCTACGA CTACCCCATG 1800
 GCGCTGTCTA GCACCTTCTG GCTGTTCTTT ACCATCATCG ATGGCCCGAG CAACTACAAC 1860
 GTGGACCTGC CCTTCATGTA CAGCATCACC TATGCTGCTT TTGCCATCAT CGCCACACTG 1920
 CTATGCTCA ACCTCTCAT TGCCATGATG GGCACACTTC ACTGSCBAGT GGGCCATGAG 1980
 CGGATGAGC TGTGGAGGGC CCAGATTGTG GCCACCAGG TGATGCTGGA GCGGAAGCTG 2040
 CCTGCTGCC TGTGGCTCTG CTCGGGATC TGGGACCGG AGTATGGCCT GGGAGACCGC 2100
 TGGTTCCTGC GGGTGGAGAG CAGGCAAGAT CTCACCGGCG AGCGGATCCA ACCTACGCA 2160
 CAGGCTTCC ACACCCGCGG CTCGAGGAT TTGGACAAAG ACTCAGTGGG AAAACTAGAG 2220
 CTGGGCTGTC CCTCAGCCC CCACCTGTCC CTTCCTATGC CCTCAGTGTG TCBAAGTACC 2280
 TCCGACAGA GTGCCAATTG GGAAGGCTT CGCAAGGGA CCTGAGGAG AGACCTGCGT 2340
 GGGATATCA ACAGGGCTCT GGAGGACGGG GAGAGCTGGG AATATCAGAT CTGACTGCGT 2400
 GTTCTCACTT CGCTTCTGAG AACTTGTCTT CATTTTCTTG GGTGCATCAA ACAAAACAAA 2460
 AACCAAAAC CATCTCCAG CATCTCCAG GCGCCAGGG AGAAAGAGGA GTAGCATGAA 2520
 CGCCAGGAA TGTACCTTGA GAATCACTGC TCCAGGCTTG CATTACTCCT TCAGCTCTGG 2580
 GGCAGAGAA GGCACGCCA AGCAGCGGGG TGGCAGGGG TGAGGAATTC TCCTGTGCC 2640
 20 TGCTCATCAC CCTTCCGACA GGAGCACTGC ATGTACAGAG ACTTTAAAAA CAGGCCAGCC 2700
 TGTCTGGGG CTGCTCTCC ACCCCAGGGT CATAGTGGG GAGAGAGCCC TTCCAGGGC 2760
 ACCCAGCGG GTGACAGGA GTGACAGAGT TGTGAAAGC GTGTGAGTGA GGGAGACAG 2820
 AACGCTCTG GGGGTGGAA GTGGGCTAG GTCTTGCAA CTCATCTTC AATAAAGTGG 2880
 25 TTTTCGATC CTGAAAAA AAAAAA AAAAAA 2918

Seq ID NO: C194 DNA Sequence
 Nucleic Acid Accession #: NM_021910.1
 Coding sequence: 260..601

30 1 11 21 31 41 51
 GTTCTCCACA ACTGCCAGCA ATCCTTCCAC CAGGCAAAAC ACATCATCTA AGGAAAAGAA 60
 GTGAGGTTTG CTTAGGGCGT GGCAGCTTCG GATAAACGCA GGACTCCGCC TGGCAGCCCG 120
 35 ATTTCTCCCG GAACCTCTGC TCAGCCTGGT GAACCAACA GGCAGAGTT TCACCCAGTC 180
 CCGACTCCAC GGTGCAGCTG CGGCTTATCT CTCAGCCGAG CGAGATGCCA GCCTTCCCTGT 240
 CCGGGCCGAG CGCTCTGACA TGCAGAAAGT GACCTTGGGC CTGCTTGTGT TCCTTGGCAGG 300
 CTTTCTCTTC CTGGAAGCCA ATGACCTAGA AGATAAAAA AGTCCTTTCT ACTATGACTG 360
 GCACAGCTTC CAGGTGTGGG GGTCTATCTG CGCTGGGCTT CTGTGCCCA TGGGCATCAT 420
 CATCTCATG AGTGAAGTGA GGAGCTCGGG GGAGCAGGCG GCGCGGGCT GGGGCTCCCC 480
 40 TCCCTGACC ACTCAGCTCT CCCAACAGG TGCAAAATGC AATGCAAGT TTGGCCAGAA 540
 GTCCGGTCA CATTCCAGGG AGACTCCACC TCTCATCACC CCGGGCTCAG CCCAAGCTG 600
 ATGAGACAG ACCAGCTGAA ATGGGTGGA GGACCGTTCT CTGTCCGAG CTCTGTCTC 660
 TGCAAGAAA CTTGAATCTC AGGATGGAAT TCTTCTCTCT CTGCTGGAC TCCTTTGCAAT 720
 GGCAGGCTC CATCTCACT CTGCAAGAG GGTCTCTTTG TTCAATTTT TTAATCTAA 780
 45 AATGATTGTG CCTCTGCCCA AGCAGCTCG AGACTTCTA TGTGTGCAAT GGGGTGGGGC 840
 TTGGGGCACC ATGAGAAGGT TGGGCTGCC TGGAGGCTGA CACAGAGGCT GGCAGTGGC 900
 CTGCTGTGTG GGAAGAGCCC ACAGGCTGT TCCCTGTGG CTGGGACAT GGCACAGGCC 960
 CGCCCTCTGC CTCCTCAGCC ATGGGACCTC ATATGCAATT TGGGATTTAC TAGTAGCCAA 1020
 AAGGAATGA AACCTGAGCT AACAGATGG AACACTGGAA CATTCAGTG GACCCGAGAC 1080
 50 CATTCAGGA AAATCTGGAC ATAGGATGCT CCGCTATGA TGGAAAGTGT CAGCAGTTT 1140
 ATAATAGTAA GCGCTGTGA CCTCTCACT TACCCGAGA CCTCACTTA TTACAGATC 1200
 TTTCCAAATA TACTTAATA CCGCAAGCC CGTTAAATA TCCCTATGC TACCTTAAT 1260
 AACATCAAT GACCAATAG TGTGAGAACT TCCACAAAG CTCAAAGTCC CTGTAGACTC 1320
 CCAATACCT AATAGGAGAT GCGAAATGTT CTCATGAAT ACCCCACAAC AGCGCTAAA 1380
 55 CTCAAACAC CCAAAATAT CTCTCCAT GTCTGAGAC ATGAACCAA AAAGAGCCC 1440
 ACATAAACT CGTGACTGT CCGCTC 1466

Seq ID NO: C195 DNA Sequence
 Nucleic Acid Accession #: NM_005971.2
 Coding sequence: 176..439

60 1 11 21 31 41 51
 GTTCTCCACA ACTGCCAGCA ATCCTTCCAC CAGGCAAAAC ACATCATCTA AGGAAAAGAA 60
 GTGAGGTTTG CTTAGGGCGT GGCAGCTTCG GATAAACGCA GGACTCCGCC TGGCAGCCCG 120
 65 ATTTCTCCCG GAACCTCTGC TCAGCCTGGT GAACCAACA GGCAGAGTT TCACCCAGTC 180
 GAAGGTGACC CTGGGCTGCG TTGTGTTCTT GGCAGGCTTT CTGTCTTGG ACGCCAATGA 240
 CCTAGAGAT AAAACAGTC CTTTCTACTA TGAATGACAC AGCTTCAGG TTGGCGGGCT 300
 CATCTGCGCT GGGTCTGCT GCGCCATGG CATCATCATC GTCATGAGTG CAAAATGCAA 360
 70 ATGCAAGTTT GGCAGAGGT CCGGTCAACA TCCAGGGGAG ACTCCACCTC TCATCAGCCC 420
 AGGCTCAGCC CAAAGCTGAT GAGGACAGAC CAGCTGAAT TGGTGGAGG ACCGTCTCT 480
 GTCCCAAGGT CCGTCTCTG CACAGAACT TGAACCTCAG GATGGAATTC TTCTCTCTCT 540
 GCTGGGACCT CTTTGCATGG CAGGGCTCA TCTCACTCT CGCAGAGGG TCTCTTGTG 600
 CAATTTTCTT TAATCTAAA TGTATGTGCC TCTGCCCCAG CAGCCTGGAG ACTTCTATG 660
 75 TGTGCTTGG GGTGGGGCTT GGGGACCAT GAGAGGTTG GGTGCCCCG GAGGCTGACA 720
 CAGAGGCTGG CACTGAGCCT GCTTGTGGG AAAAGCCAC AGGCTGTTC CCTTGTGGT 780
 TGGGACATGG CACAGGCCG CCTCTGCTT CCTCAGCAT GGGACCTCAT ATGCAATTTG 840
 GGATTTACTA GTAGCCAAA GGAATGAAAG AGAGCTCTAA CCAGATGGA CACTGGAACA 900
 TTCCAGTGA CCTGTGACCA TCCAGGAAA ACTGGGACAT AGGATCTGCC CGCTATGATG 960
 80 GAGTGTTC AAGAGTTTAT AATAGTAAG CCTGTGACC CTCTCACTTA CCGGAGACC 1020
 TCACTTTATT ACAGATCTT TCCAAATACC CAATATCCC TGCAAGCCG TTAATAAT 1080
 CCTATGCTA CCTTAAATA CATACAATGA CCACATAGT TGAAGACTTC CAACAAGCTT 1140
 CAAGTCCCT TGAGACTCCC CAATACCTAA TAAGGCATGC GAAATGTTCT CATGAACAT 1200
 CCCACAACAC GCTTAAACT CAAAACACC AAAAATATCT CTCCAATGT CCGAGACAT 1260

GAACCCAAAA AGAGACCAC AATAAACTCG TGACTTGTCC CCTC

1304

Seq ID NO: C196 DNA Sequence

Nucleic Acid Accession #: NM_004961.2

Coding sequence: 55..1575

5

1	11	21	31	41	51	
GCCAGAGCGT	GAGCOGCGAC	CTCCGCGCAG	GTGGTCCGCG	CGGTCTCCGC	GGAAATGTG	60
TCCAAAGTTC	TTCCAGTCTCT	CCTAGGCATC	TTATTGATCC	TCCAGTCGAG	GGTCGAGGGA	120
CCTCAGACTG	AATCAAGAA	TGAAGCCTCT	TCCCCTGATG	TTGTCATG	CCCCCAGCCC	180
CAGCCTCTGG	AAAATCAGCT	CCTCTCTGAG	GAAACAAAGT	CAACTGAGAC	TGAGACTGGG	240
AGCAGAGTTG	GCAACTGCC	AGAAGCCTCT	CGCATCTGGA	ACACTATCCT	GAGTAATTAT	300
GACCACAAAC	TGCCCTCTGG	CATTGGAGAG	AAGCCCACTG	TGGTCACTGT	TGAGATGCCC	360
GTCAACAGCC	TTGTCCTCT	CTCATCTCTA	GACATGGAAT	ACACCATGGA	CATCATCTTC	420
TCCCAGACCT	GGTACGACGA	ACGCTCTCTG	TACAACGACA	CCTTTGAGTC	TCTTGTCTCG	480
AATGGCAATG	TGGTGAGCCA	GCTATGGATC	COGACACCTT	TTTTTAGGAA	TTCTAAGAGG	540
ACCCACGAGC	ATGAGATCAC	CATGCCCAAC	CAGATGCTCC	GCATCTACAA	GGATGGCAAG	600
GTGTTGTACA	CAATTAGGAT	GACCATTGAT	GCCGGATGCT	CACCTCCACAT	GCTCAGATTT	660
CCAAATGGATT	CTCACTCTTG	CCCTCTATCT	TTCTCTAGCT	TTTCTATACC	TGAGAATGAG	720
ATGATCTACA	AGTGGGAAAA	TTTCAAGCTT	GAATCAATG	AGAAGAATC	CTGGAAGCTC	780
TTCCAGTTTG	ATTTTACAGG	AGTGAGCAAC	AAAACCTGAA	TAATCACAAC	CCCAGTTGGT	840
GACTTCATGG	TCATGACGAT	TTTCTTCAAT	GTGAGCAGGC	GCTTTGGCTA	TGTTCCTTTT	900
CAAAATCATG	TGCTTCTTTC	CGTGACCAAG	ATGCTCTCTT	GGGTTTCTCT	TTGGATCAAG	960
ACAGAGTCTG	CTCCAGCCCG	GACCTCTCTA	GGGATCACTT	CTGTTCTGAC	CATGACCACG	1020
TTGGGCACCT	TTTCTCTGAA	GAATTTCCCG	CGTCTCTCTT	ATATCACAGC	CTTGGATTTC	1080
TATATCGCCA	CTTCTCTGCT	CTTCTCTCTT	TGCGCTCTGT	TGGAGTTTGC	TGTGCTCAAC	1140
TTCCGTGATCT	ACAACCCAGC	AAAAGCCCAT	GCTTCTCTTA	AACTCCGCGA	TCTCTGTATC	1200
AATAGCCGTG	CCCATGCTTC	TACCCGTGCA	CGTTCGCGAG	CCTGTGCCCG	CCCAATCAG	1260
GAAGCTTTTG	TGTGCCAGAT	TGTCAACACT	GAGGGAGTGA	ATGGAGAGGA	GCGCCGCTCT	1320
TGCTCAGCC	AGCAGCCCCC	TAGCCCAAGT	AGCCCTGAGG	GTCCCCGACG	CCTCTGCTCC	1380
AAGCTGGCCT	GCTGTGAGTG	GTGCAAGCGT	TTTAAGAGT	ACTTCTGCAT	GGTCCCGAT	1440
TGTGAGGGCA	GTACCTGSCA	GCAGGGCCCG	CTCTGCATCC	ATGCTACCG	CCTGGATAAC	1500
TACTCGAGAG	TGTCTTCCCG	AGTGACTTTC	TTCTTCTTCA	ATGCTCTCTA	CTGGCTGTGT	1560
TGCTTAACCT	TGTAGGTACC	AGCTGGTACC	CTGTGGGGCA	ACCTCTCCAG	TTCCCTAGGA	1620
GGTCCAGCC	CCTTGCCAA	GGAGTTGGGG	GAAAGCAGCA	GCAGCAGCAG	GAGCGACTAG	1680
AGTTTCTCT	GCCCATCTCC	CCAAACAGAA	GCTTGACAGG	GGTTTGTCTT	TGCTGCCCTT	1740
CTCCCTTACC	TGCCCATCTC	ACTGAGTCTT	CTCAGCAGAC	CATTCTCAAT	TATTAATAAA	1800
TGGGCCACCT	CCCTCTCTCT	CAAGGAGCAT	CCGTGATGCT	CAGTGTTCAG	AACCAACAGC	1860
ACTTAGTGAT	CAGCTCCCTA	AAACCATGCC	TAAGTACAGG	CGGATTAGCT	ATCTTCCAAC	1920
AATGCTGACC	ACCAGACAAT	TACTGCAATT	TTCCAGAAGC	CCACTATTGC	CTTTGTAGTG	1980
CTTTGGGCC	AGTTCTGGCC	TCAGCCCTCAA	AGTGCACGGA	CTAGTGTGCT	GGCTATACCT	2040
GGCAGCTCAT	TAAAGTCTTG	GGCAGCAGTA	TAACAGGAGG	AAGAGATCCC	TCTCTTTTGG	2100
TCAGATTAAT	ATGTTCTCAG	TTCTCTCTCC	CTGCTACCCC	TTTCTCTGCA	GATAGATAGA	2160
CAGTGGCATT	ATCCCTTTAG	GAAAGAGGGG	GGCGACGAGG	AGAGCCTATT	TGGGACAGCA	2220
TTCTCTCTTC	TCTGCTCTG	TGACATCTCC	CTCTCTTTCG	TGGCTCCATC	TTTGTCTGTC	2280
ACTACCAATT	CAATGCCCTT	CATCCATGG	GTATCTATT	TTGTGTGTA	TTATAGTAAC	2340
TACTCCCTGC	TTTATATGCC	ACCTCTCTCC	TTCTCTTTGA	CCCCGTGAC	TCTTCTGTGA	2400
ACTTTCCACT	TGACTCTCC	TAGCCCTGAC	CCAGGCACTA	GGCCCTGGTG	ACTTCTGGGG	2460
GCCAGAAAC	TAGGAAACT	CGGCTTTGCA	ACAGGCATTA	CTGCCCATTG	ATTGGTGCCC	2520
ACCCAGGGCA	CAGCTGCGGA	GTCTATACAC	TTGCTTGACC	CCTGGACCCA	TAAACCAATC	2580
CAGTGTATA	CCGCGGGCAC	TCTAACCATC	ACATCAATC	AATCAAAATC	CCTTAAATTT	2640
GTATGGCACT	GGAACTTTGG	CAAGACACTT	TTGACAAGTT	GTGCTGATTT	GGAGCTTCAT	2700
GATAGCTTGG	TGAAGCTTTT	AGGGCAGGAT	TCCTATCCCC	ATTTTGCAGA	TGAAAACCTC	2760
GAGTACAGAA	TTTCTGTGGG	ACTGTGGATC	TCACTGGGAG	CTATCCAGAA	GCCCACTGTC	2820
ACCTCTCAGA	CCACATGATA	GCGCTAGACA	GCTCAGTTCA	CCATGATTCT	CTCTGTCAC	2880
CTCTGCTGGC	ACACCACTGG	CAAGGCCGAG	AATGGCGACC	TCTCTTTAGC	TCAATTTCTG	2940
GGCCTGAGGT	GCTCAGACTG	CCCCCAAGAT	CAATCTCTC	CTGGCTGTAG	TAAACCAAGT	3000
GAATGAATTT	GGACATGCCC	CAATGCTTCT	ATATGCTDAG	TGAAATCTGT	GTCTGTAATT	3060
TGTTGGGGGG	TGGATAGGGT	GGGGTCTCCA	TCTACTTTTT	GTCAACATCA	TCTGAATATG	3120
GGAAATATGT	AAATAAATAT	ATCAGCAAAG	CAAAAGAGAA	AAAAAATA		3168

Seq ID NO: C197 DNA Sequence

Nucleic Acid Accession #: NM_021984.1

Coding sequence: 572..1753

65

1	11	21	31	41	51	
GCCAGAGCGT	GAGCOGCGAC	CTCCGCGCAG	GTGGTCCGCG	CGGTCTCCGC	GGAAATGTG	60
TCCAAAGTTC	TTCCAGTCTCT	CCTAGGCATC	TTATTGATCC	TCCAGTCGAG	AACATGTATA	120
CAGAGAGAGT	CTCAAAATCAT	AGTGTACAG	CTGATGAGTT	GTCAAAAAT	GACCAACGCG	180
GTGTAAGAA	AGCCAAATCA	AGGACCCGAA	TGTGAGCAGG	ACCTCAGAG	CCCCCTTTGT	240
CAGTCCCTCC	CAGCAAGGC	AGCACTATCC	GGACTTCTAA	CACCTCGGG	TGAGGGGACC	300
TCAGACTGAA	TAAAGAAATG	AAGCCTCTTC	CGTGATGTT	GTCTATGGCC	CCGAGCCCCA	360
GCCTCTGGAA	AATCAGCTCC	TCTCTGAGGA	AACAAGTCA	ACTGAGACTG	AGACTGGGAG	420
CAGAGTGGC	AAACTGCCAG	AAGCCTCTCG	CATCTGAAC	ACTATCTGTA	GTAATTATGA	480
CCCAAACTG	CGCCCTGGCA	TTGGAGAGAA	GCCCACTGTG	GTCACTGTG	AGATCTCGGT	540
CAACAGCCTT	GGTCTCTCT	CTATCTTAGA	CATGGAATAC	ACCATGACAC	TCATCTCTC	600
CCAGACCTGG	TACGACGAA	GCTCTGTTA	CAACGACACC	TTTGAGTCTC	TTGTTCTGAA	660
TGGCAATG	GTGAGCCAGC	TATGGATCCC	GGACACCTTT	TTTAGGAATT	CTAAGAGGAC	720
CCACGAGAT	GAGATCACCA	TGCCCAACCA	GATGGTCCCG	ATCTACAAGG	ATGGCAAGGT	780
GTGTACACA	ATTAGGATGA	CCATTGATGC	CGGATGCTCA	CTCCACATGC	TCAGATTTC	840
AATGGATTCT	CAGTCTTGCC	CTCTATCTTT	CTCTAGCTTT	TCTATCTCTG	AGAATGAGAT	900
GATCTACAG	TGGGAAATAT	TCAAGCTTGA	AATCAATGAG	AAGAACTCCT	GGAGCTCTT	960

	CCAGTTGGAT	TTTACAGGAG	TGAGCAACAA	AACTGAAATA	ATCACAAACC	CAGTTGGTGA	1020
	CTTCATGGTC	ATGACGATTT	TCTTCAATGT	GAGCAGGCGG	TTTGGCTATG	TTGCCTTTCA	1080
	AAACTATGTC	CCTTCTCTCG	TGACCAAGAT	GTCTCTCCGG	GTTCCTCTTT	GGATCAAGAC	1140
5	AGAGTCTGCT	CCAGCCCGGA	CCTCTCTAGG	GATCACCTCT	GTTCGACCA	TGACCACGTT	1200
	GGGCACCTTT	TCTCGTAAGA	ATTTCGCCCG	TGTCCTCTAT	ATCACAGCCT	TGGATTTCTA	1260
	TATCGCCATC	TGCTTCGCTC	TCTGCTCTCT	CGCTCTGTTG	GAGTTTGCTG	TGCTCAACTT	1320
	CCTGATCTAC	AACCCAGACAA	AAGCCCATGC	TTCTCTTAAA	CTCCGCCATC	CTCGTATCAA	1380
	TAGCCGTGCC	CATGCCCTTA	CCCGTGCAAG	TTCCCGAGCC	TGTGCCCGCC	AACATCAGGA	1440
10	AGCTTTTGTG	TGCCAGATTG	TCACCACTGA	GGGAAGTGAT	GGAGAGGAGC	GCCCGTCTTG	1500
	CTCAGCCAG	CAGCCCCCTA	GCCCAGGTAG	CCCTGAGGGT	CCCCGACGCC	TCTGCTCCAA	1560
	GCTGGCCTGC	TGTGAGTGGT	GCAAGCGTTT	TAAGAAGTAC	TTCTGCAATG	TCCCGGATTC	1620
	TGAGGCGAGT	ACCTGGCAGC	AGGCCCGCCT	CTGCATCCAT	GTCTACCGCC	TGGATAACTA	1680
	CTCGAGAGTT	GTCTTCCAGC	TGACTTTCTT	CTTCTTCAAT	GTGCTCTACT	GGCTTGTGTT	1740
	CCTTAACCTG	TAGGTACACG	CTGTACCCCT	GTGGGGCAAC	CTCTCCAGTT	CCCCAGGAGG	1800
15	TCCAGCCGCC	TGCGCAAGGG	AGTGGGGGGA	AAGCAGCAGC	AGCAGCAGGA	GCGACTAGAG	1860
	TTTTCTCTGC	CCCATTCCCC	AAACAGAGAG	TTGCAGAGGG	TTTGTCTTTG	CTGCCCTCTT	1920
	CCCCTACCTG	GCCCATTCAC	TGAGTTTCTT	CAGCAGACCA	TTTCAAAATTA	TTAATAAATG	1980
	GGCCACCTCC	CTCTCTCTCA	AGGAGCATCC	GTGATGCTCA	GTGTTCAAAA	CCACAGCCAC	2040
	TTAGTGATTA	CGTCCCTAAA	ACCATGCCCTA	AGTACAGGCG	GATTAGCTAT	CTTCCAACTA	2100
20	TGCTGACCAC	CAGACAATTA	CTGCATTTTT	CCAGAAGCCC	ACTATTGCTT	TTGCACTGCT	2160
	TTGCGGCCAG	TTCTGGCCTC	AGGCTCAAGG	TGCACCGACT	AGTTGCTTGC	CTATACCTGG	2220
	CACCTCATTA	AGATGCTGGG	CAGCAGTATA	ACAGGAGGAA	GAGATCCCTC	TCCTTTGGTC	2280
	AGATTATAT	GTCTCAGTTT	CTCTCTCCCT	GCTACCCCTT	TCTCTGAGAA	TAGATAGACA	2340
	CTGGCATTTT	CCCTTAAAGA	AGAGGGGGGG	GCAGCAAGAG	AGCCTATTGT	GGACAGCAAT	2400
25	CCTCTCTCTC	TGCTCTCTGT	ACATCTCCCT	CTCCTTGCTG	GCTCCATCTT	TGCTCTGAC	2460
	TACCAATTTA	ATGCCCCCTA	TCCAAATGGT	ATCTATTTTT	GTGTGTGATT	ATAGTAACCTA	2520
	CTCCCTGCTT	TATATGCTAC	CCTCTTCCCT	CTCTTTGACC	CCTGTGACTC	TTCTGTGAAC	2580
	TTTCCAGTGA	ACTTCCCTTA	GCCCTGACCC	AGGCACTAGG	CCTTGGTGAC	TTCTTGGGGC	2640
	CAAGAAATTA	AGGAAATCTG	GCTTTGCAAC	AGGCATTAAT	CCCATATGAT	TGGTGCCAC	2700
30	CCAGGGCACA	CTGTCCGAGT	TCTATCACTT	GCTTGACCCC	TGGACCCATA	AACCAATCCA	2760
	CTGTTATACC	CGGGGCACCT	TAACCATCAC	AATCAATCAA	TCAATTTCCC	TAAATTTTGT	2820
	ATGGCACTGG	AACTTTGGCA	AAGCACTTTT	GACAAAGTTG	GTCTGATTGG	AGCTTTCATGA	2880
	TAGCCTTTGT	ACATCTTTAG	GCCAGGATTC	TTATCCCATC	TTTGCAGATG	AAACCCCTGA	2940
	GTCAAGATT	TCTGTGGGAC	TGTGGATCTC	ACTGGAAGCT	ATCCAGAGCC	CCACTGTGAC	3000
35	CTTCTAGACC	ACATGATAGG	GCTAGACAGC	TCACTTCACC	ATGATCTCTT	TCTGTCACTT	3060
	CTGCTGGCAC	ACCAGTGGCA	AGGCCCGGAA	TGGCGACCTC	TCTTTAGCTC	AATTTCTGGG	3120
	CCTGAGGTGC	TCCAGTGCCT	CCCAAGATCA	AATCTCTCCT	GGCTGTAGTA	ACCCAGTGGG	3180
	ATGAATTTGG	ACATGCCCCA	ATGCTTCTAT	ATGCTAAGTG	AAATCTGTGT	CTGTAATTTG	3240
40	TTGGGGGGTG	GATAGGGTGG	GGTCTCCATC	TACTTTTGTG	CACCATCTCT	TGAAATGGGG	3300
	AAATATGTAA	ATAAATATAT	CAGCAAGC				3320

Seq ID NO: C198 DNA Sequence
Nucleic Acid Accession #: NM_021987.1
Coding sequence: 572..1657

45	1	11	21	31	41	51	
	1	11	21	31	41	51	
	GGCAGAGCGT	GAGCCGCGAG	CTCCGCGCAG	GTGGTCGCGC	CGGTCTCCGC	GGAAATGTTG	60
50	TCCAAAGTTC	TTCCAGTCCT	CCTAGGCATC	TTATTGATCC	TCCAGTCBAG	AACATGTATA	120
	CAGAGAGTGG	CTCAATCAT	AAGTGTACAG	CTGATGAGTT	GTCAAAAAT	GACCACAGCG	180
	GTGTAAAGAA	AGCCAARTCA	AGGACCCGAA	TGTGAGCAGG	ACCTCAGAA	CCCCCTTTGT	240
	CACCTGCTCC	CAGCAAGAGC	AGCACTATCC	GGACCTCTAA	CAACCATCGG	TGAGGGAGCC	300
	TCAGACTGAA	TCAAGAATG	AAGCCTCTTC	CGGTGATGTT	GTCTAGGCC	CCGAGCCCCA	360
55	GCCTCTGGAA	AATCAGCTCC	TCTCTGAGGA	AACAAAGTCA	ACTGAGACTG	AGACTGGGAG	420
	CAGAGTTGGC	AACTGCGCAG	AAGCCTCTCG	CATCCTGAAC	ACTATCCTGA	GTAATTATGA	480
	CCACAACTTC	CGCCCTGGCA	TTGGAGAGAA	GCCCACTGTG	GTCACTGTTG	AGATCTCCGT	540
	CAACAGCCTT	GGTCTCTCT	CTATCCTAGA	CATGGAATAC	ACCAITGACA	TCATCTTCTC	600
	CCAGACCTGG	AATCTTAAGA	GGACCCACGA	GCATGAGATC	AACATGCCCA	ACCAGATGGT	660
60	CGCATCTAC	AAGGATGGCA	AGGTGTTGTA	CACAAATAGG	ATGACCAATG	ATGCCCGATG	720
	CTCACTCCAC	ATGCTCAGAT	TTCCAATGGA	TTCTCACTCT	TGCCCCCTAT	CTTCTCTAG	780
	CTTTTCTCT	CCTGAGAAATG	AGATGATCTA	CAAGTGGGAA	AATTTCAAGC	TGGAATCTCA	840
	TGAGAGAAAC	TCCTGGGAAGC	TCTTCCAGTT	TGATTTTACA	GGAGTGAGCA	ACAAAACCTGA	900
	AATAATCACA	ACCCCAAGTTG	GTGACTTCAT	GGTCATGAAG	ATTTTCTTCA	ATGTGAGCAG	960
65	GCGGTTTGGC	TATGTTGCCCT	TTCAAAACTA	TGTCCCTTCT	TCCGTGACCA	CGATGCTCTC	1020
	CTGGGTTTCC	TTTTGGATCA	AGACAGAGTC	TGCTCCAGCC	CGGACCTCTC	TAGGGATCAC	1080
	CTCTGTTCTG	ACCATGACCA	CGTTTCTCGT	CTTTTCTCGT	AAGAATTTCC	CGCGTGTCTC	1140
	CTATATCA	GCCTTGGATT	TCTATATCGC	CATCTGCTTC	GTCTCTGCTT	TGTCGCTCTT	1200
	GTGTGAGTTT	GCTGTGCTCA	ACTTCTGAT	CTACAAACAG	ACAAAAGCCC	ATGCTTCTCC	1260
70	TAAACTCCGC	CATCTCTGTA	TCAATAGCCG	TGCCCATGCC	CGTACCCCTG	CACGTTCCCG	1320
	AGCCGTGTC	CGCCACATC	AGGAAGCTTT	TGTGTGCCAG	ATTGTACCCA	CTGAGGGAAG	1380
	TGATGGAGAG	GAGCGCCCTT	CTTCTCTAGC	CCAGCAGCCC	CCTAGCCCTGA	GTAGCCCTGA	1440
	GGGTCCCGCC	AGCCTTGTCT	CCAAGCTGGC	CTGCTGTGAG	TGGTGCAGGC	GTTTTAAGAA	1500
	GTACTTCTGC	ATGTGTCCTG	ATTGTGAGGG	CAGTACCTGG	CAGCAGGCCC	GCCTCTGCAT	1560
75	CCATGTCTAC	CGCTCGGATA	ACTACTCGAG	AGTTGTTTTC	CCAGTGACTT	TCTTCTTCTT	1620
	CAATGTGCTC	TACTGGCTTG	TTTGCCTTAA	CTTGTAGGTA	CCAGCTGGTA	CCCTGTGGGG	1680
	CAACCTCTCC	AGTTCCCCAG	GAGGTCCAA	CCCCTTGCCA	AGGGAGTTGG	GGGAAAGCAG	1740
	CAGCAGCAGC	AGGAGCGACT	AGAGTTTCTC	CTGCCCTCTT	CCCCAAACAG	AAGCTTGCAG	1800
	AGGGTTTGTG	TTTGTGCTCC	CTCTCCCTTA	CCTGGCCCAT	TCATCTGAGT	TTCTCAGCAG	1860
80	ACCAITTCAG	AATGTTAATA	AATGGGCCCC	CTCCCTCTTC	TTCAAGGAGC	ATCCGTGATG	1920
	CTCAGTGTTC	AAACCCACAG	CCACTTAGTG	ATCAGCTCCC	TAAACCATG	CCTAAGTACA	1980
	GGCGGATTAG	CTATCTTCCA	ACAATGCTGA	CCACCAAGCA	ATTACTGCTT	TTTTCCAGAA	2040
	GCCCACTATT	GCCCTTGCAG	TGCTTTGCGC	CCAGTCTGCG	CCTCAGCCTC	AAAGTGCACC	2100
	GACTAGTTGC	TTTCTCTATC	CTGGCAGCTC	ATTAAGATGC	TGGGCAGCAG	TATAACAGGA	2160
	GGAGAGATGC	CCTCTCCTTT	GCTCAGATTA	TTATGTTCTC	AGTTCTCTCT	CCCTGCTACC	2220

5	CTTTCTCTG CAGATAGATA GACACTGGCA TTATCCCTTT AGGAAGAGGG GGGGGCAGCA 2280
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	GCTGGCTCCA TCTTTCTGCT GCACTACCAA TTCAATGCCC TTCTACCAAT GGGTATCTAT 2400
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	GACCCCTGTG ACTCTTTCTG TAACTTTCCC AGTGACTTCC CCTAGCCCTG ACCAGGCACT 2520
	AGGCCITGGT GACTTCTCTG GGCACAGAAA CTAAGGAAAC TCGGCTTTGC AACAGGCATT 2580
	ACTCGCCATT GATTGGTGCC CACCCAGGGC ACACCTGTCCG AGTTCTATCA CTTGCTTGAC 2640
	CCCTGGACCC ATAAACCACT CCACCTGTAT ACCCGGGGCA CTCTAACCAT CACAATCAAT 2700
10	CAATCAAAAT CCCTTAAATG TGTATGGCAC TGGAACTTTG GCAAGCACT TTTGACAAGT 2760
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	CATTTTGCAG ATGAAACCC TGAOTCACAG ATTCTGTGG GACTGTGGAT CTCCTGSA 2880
	GCTATCCAAAG AGCCCACTGT CACCTTCTAG ACCCATGAT AGGGCTAGAC AGCTCAGTTC 2940
	ACCATGATTC TCTTCTGTCA CCTCTGTGG CACACCACTG GCAAGGCCCA GAATGGGAC 3000
15	CTCTCTTTAG CTCAATTTCT GGGCCTGAGG TGCTCAGACT GCCCCCAAGA TCAATCTCT 3060
	CTCGGCTGTA GTAAACCACT GGAATTAAT TGGACATGCC CCAATGCTTC TATATGCTAA 3120
	GTGAAATCTG TGTCTTAAT TGTGTGGGG GTGGATAGGG TGGGCTCTCC ATCTACTTT 3180
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Seq ID NO: C199 DNA Sequence

Nucleic Acid Accession #: NM_021990.1

Coding sequence: 1309..2490

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	CAGAGAAAGTG	CTCAAATCAT	AAGTGTACAG	CTGATGAGTT	GTCAAAAAAT	GACCACAGCG	180
	GTGTAAAGTA	AGCCAAATCA	AGGACCCGAA	TGTGAGCAGG	ACCTCAGAA	CCCCCTTTGT	240
	CACCTGCCCTC	CAGCAAAAGG	AGCACTATCC	GGACTTCTAA	CACCATCGGT	GAGTTTCATA	300
30	CCTTGGCAGA	TGGCTTTTAA	CATTTTGTGT	TAATTCGAAT	ATCTCTACTA	ATCTCTCTCT	360
	TTTTCTTGGC	TGTGGTGATC	GGCTGTGGAG	CTCAGGGTGG	ACTCCTGTG	GGCAGCCAGT	420
	TCCTGSAATG	CTGTCTGTGG	GTXGAGGACT	CCTGCCCTTC	CXTGTTAGAC	ACCCACAAAG	480
	GCTGCTCTTT	AGCCTCTCTC	CCTTCATCCC	CTTCCCCTGC	CCCCAGTSCA	ACGAGTATTA	540
	CACAAACCAAC	AAAACCGCAA	AATATTCCCA	CAATTTTCTG	GTCTCTCTG	GGAGAGGGCCG	600
35	CTCTGGCTTT	TCCCTCTCAG	CTGGGCCCTC	TGCTGTCTCC	TCACTCTCTG	TTGGTGTCTG	660
	TCAGGCTGAC	TAGAGGCCAA	GGCACAACAC	ACTAGGCCAA	CGCGCCAGC	GCTCAGACAT	720
	AAATGCCCTC	TTCATTTTAC	GTGTAACTT	CTTTAAAAAT	CTAGGTCTTG	TTTTTGTGTA	780
	TTTTTTCTTA	AATAAAAGAG	TGATCATATA	AGAGGGACAG	CATAGAAAGT	CCCCAAAGAG	840
40	CAGCAAGGTT	TTAAGAAAT	TACAAGGCTT	AATCTGTGAC	TGTCTTATAA	TTTGCTATTA	900
	CCAGTCACAA	TTTAACTAGG	TTTTGTGTGT	AAAATCTGTT	TTGGTTTGCT	TCTGTCCCAA	960
	GAGGCATGAG	CTGGGGCCCC	TACAGAGTGC	AGGGCAGAGC	TTCAATTTTC	GTTTGAATGT	1020
	TCTAGGGTCG	AGGGACCTCA	GACTGAATCA	AAGAATGAAG	CCCTCTCCCG	TGATGTTGTC	1080
	TATGCCCCCC	AGCCCCAGCC	TCTGGAAART	CAGCTCTCTC	CTGAGGAAAC	AAAGTCAACT	1140
45	GAGACTGAGA	CTGGGAGCAA	AGTGTGCAAA	CTGCCAGAG	CCTCTCGCAT	CCTGACACT	1200
	ATCCCTGAGTA	ATTATGACCA	CAACTGCGC	CTGGCATTG	GAGAGAAGCC	CACGTGTGTC	1260
	ACTGTTGAGA	TCTCCGTCAA	CAGCCTTGGT	CCTCTCTCTA	TCTAGACAT	GGAATACACC	1320
	ATTGACATCA	TCTTCTCCCA	GACCTGGTAC	GACGAAACCC	TCTGTTACAA	CGACACCTTT	1380
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50	AGGAATTTCTA	AGAGGACCCA	CGAGCATGAG	ATCACCATGC	CCAACCAAGT	GGTCCGATCT	1500
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	CACATGCTCA	GATTTCCAAT	GGATTCTCAC	TCTTCCCTTC	TATCTTTCTC	TAGCTTTTCC	1620
	TATCCTGAGA	ATGAGATGAT	CTACAGTGG	GAAATTTTCA	AGCTTGAAT	CAATGAGAAG	1680
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	GGCTATGTTG	CCTTTCAAAA	CTATGTCCCT	TCTTCCGTGA	CCACGATGCT	CTCTGGGT	1860
	TCCTTTTGGG	TCAAGACAGA	GATCTGCTCA	CGCCGACCT	CTCTAGGGAT	CACCTCTGTT	1920
	CTGACCATGA	CCACGTTGGG	CACCTTTTCT	CGTAAAGATT	TCCCCTGTGT	CTCTATATC	1980
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	CGCCATCTTC	GTATCAATAG	CGTGGCCAT	GCCCGTACCC	GTGCACTTTC	CCGAGCCTGT	2160
	GCCCGCCAAC	ATCAGGAAGC	TTTTGTGTGC	CAGATTGTCA	CCACTAGAGG	AAGTGAATGA	2220
	GAGGAGCGCC	CGTCTGTGTC	AGCCACGACG	CCCCCTAGCC	CAGGTAGCCC	TAGGGTCCC	2280
	CGCAGCTCT	GCTCCAAGCT	GGCCCTCTGT	GAGTGGTGA	AGCGTTTAA	GAGTACTCT	2340
65	TGCATGCTCC	COGATTGTGA	GGGCAATAAC	TGGCAGCAGG	CGCCGCTCTG	CATCCATGTC	2400
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	AGCAGGAGCG	ACTAGAGTTT	TTCTTCCCCC	ATTCCCAAA	CAGAGACTTG	CAGAGGGTTT	2640
70	GTCTTGTCTG	CCCCCTCCCC	CTACCTGGCC	CATTCACTGA	TTTCTCTCAG	CAGACCATTT	2700
	CAATTTATTA	ATAAATGGGC	CACCTCCCTC	TTCTTCAAGG	AGCATCCGTG	ATGCTCAGTG	2760
	TTCAAAACCA	CAGCCACTTA	GTGATCAGCT	CCCTAAAACC	ATGCTTAAGT	ACAGGCGGAT	2820
	TAGCTATCTT	CCACAAATGTC	TGACCACAG	ACAAATACTG	CATTTTCCCA	GAGGCCACT	2880
	ATTGCCCTTG	CAGTGTCTTC	GGCCAGTTC	TGGCCTCAGC	CTCAAAAGTGC	ACCGACTAGT	2940
75	TGCTTGCTTA	TACCTGGCAC	CTCATTAAGA	TGCTGGGCGG	CAGTATAACA	GAGGAGAGAG	3000
	ATCCCTCTCC	TTTGGTCAGA	TTATTAATGT	CTCAGTCTTC	TCTCCCTGCT	ACCCCTTTCT	3060
	CTCAGATAG	ATAGACACTG	GCATTATCCC	TTTAGGAAGA	GGGGGGGGCA	GCAAGAGAGC	3120
	CTATTTGGGA	CAGCATTCCT	CTCTCTCTG	TGCTGTGACA	TCTCCCTCTC	CTGTGCTGGCT	3180
	CCATCTTTGG	TCTGCACTAC	CAATTCATG	CCCTTCACTC	AATGGGTATC	TTTTTTTGTG	3240
80	TGTGATTTA	TGAATCTACT	CTGCTTTTAT	ATGCCACCTT	CTTCTCTCTC	TATTTACCTG	3300
	GTGACTCTTT	CTGTAACCTT	CCAGTGTACT	TCCCTTAGCC	CTGACCAAGC	ACTAGGCCCT	3360
	GGTGACTTCT	TGGGGCCPAG	AAACTAAGTA	AACTCGCTCT	TGCAACAGGC	ATTACTCGCC	3420
	ATTGATTGGT	GCCCCAACAG	GGCACACCTA	GGAGATCTTA	TCATCTGCTT	GACCCCTGGA	3480
	CCCATAAAC	AGTCCACTGT	TATACCCGGG	GCACTCTAAC	CATCACAATC	AATCAATCAA	3540
	ATTCCCTTAA	ATTGTATG	GACTGGAAT	TTGGCAAGC	ACTTTTGACA	AGTTGTGTCT	3600

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GATTGGAGCT TCATGATAGC CTTGTGACAT CTTTAGGGCA GGATTCTTAT CCCCATTTTG 3660
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Seq ID NO: C200 DNA Sequence
Nucleic Acid Accession #: NM_021819.1
Coding sequence: 39..1619

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TCTCTGCGCT GGAAGTAGAG GTGCAATGA GGGTGACGG ACTGGGGCGC CGGGGAGGCC 360
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GAGCTAGCCA AGGGCTGGGC TCCTGTCTAT GGGACTTCCG GAACCGGCCA CACCCCTTCA 600
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GTGGCCACCT CTCATGTGTA CTCATTAAGG ACTCTGCCAA GGTGGGTGCC CTGCTCTATG 1200
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Seq ID NO: C201 DNA Sequence
Nucleic Acid Accession #: XM_117036.1
Coding sequence: 25..495

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GGCCCTGTGG GGTCTTCTCC ACCACACAGG TGCCCGAGGG AGGCAGGGCA GCGCCCGGTG 240
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TGTTACCGCC ACAGCGGCCG CACCGTGGT GGCTCTGTTT CTGGAACG TOCAGAACAG 420
GCAGCCCCCG AGACAGGGAG GGGCCAGCG GTGCGCCGGG GAAGTGGGA TGGGAATGAG 480
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CGGAAGCTG CAGCTTCAAC GGTGAACCTG GTGGGGAGTG AATCCATCTC AACAGAGCTG 600
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Seq ID NO: C202 DNA Sequence
Nucleic Acid Accession #: XM_167803.2
Coding sequence: 1162..1488

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GGAGGAGGGG ATCTGCCCCT CTCCACTCTC CTCTTGAATC CGGCTGGGTT TCTCTTCCC 300
CCACCAACCG CCGCCCCCGC GGAAGACCGC CCACTGAGCC AGCCCCACC TTCCAGGCGC 360
CTTCCCGCTG GGGATCCAAC CAACTGTAT CAGTGGGGCG GGGCAACGCG TCCCAATTTT 420
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GGTCTCTTCC CAACCAAGCC CACCCAGGC ACATTAGCGA CCAGGCTTGG GCTTCCCCAG 540
CGCCCCACA CCAACACGTC CAGGTGGAGC TCTGGGATGC TATGTTGGGG CGGCAAGCGG 600
TGGGCGAGG CCGGGGTAGG CTAGCACGGG AGGTAAAGGT GTTATGGGAT GGGGCGGGGG 660
CGGTCTAGGG CAATAGGAGA GCAGAGATG GGGGAACCTG AGGTTGGGG GAGGGCACCG 720

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GAGCCCTTGCC ACCATCCCAG GACTTTGGGC AAGTCAOCCG CACTCCCTGG GCCTCGGTTT 780
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 AGTGTAAATTA CCGAATCCTG ACTGCAAGGC CCACCTGCCC CTCCCCACA GAGCCTCCAG 960
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Seq ID NO: C203 DNA Sequence
 Nucleic Acid Accession #: NM_024780.1
 Coding sequence: 31..1023

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 ACCCTCATTT GCCAGGACAT CTACCGGCTC GTTCTGATGG ATTTTGTGTT CTCTTAGTTC 240
 AATTCCTTCC TGGGGGAGTT TCTGAGGAGA ATCATTGGGA TGCAACTGAT CACAAGTCTT 300
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Seq ID NO: C204 Protein Sequence
 Protein Accession #: Bos sequence

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	TCCTTCTGAT	GGATTTTGTG	TTCTCTTTAG	TCAATTCCTT	CCTGGGGGAG	TTTCTGAGGA	1740
	GAATCATGG	GATGCAACTG	ATCACAAGTC	TTGGCCCTCA	GGAGTTTGAC	ATTGCCAGGA	1800
	ACGTTCTAGA	ACTGATCTAT	GCACAACTC	TGGTGTGGAT	TGGCATCTTC	TTCTGCCCCC	1860
	TGCTGCCCTT	TATCCAAATG	ATTATGCTTT	TCATCATGTT	CTACTCCAAA	AATATCAGCC	1920
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	TCATCTTCTT	GCCTCTTTTC	CCATCCTTCA	CCGGGGTCTT	GTGCACCTG	GCCATCACC	2040
10	TCGGAGATT	GAAGCCTTCA	GCTGACTGTG	GCCCTTTTGG	AGGCTCTGCT	CTCTTCATTC	2100
	ACTCCATCTA	CAGCTGGATC	GACACCTTAA	GTACACGGCC	TGGCTACCTG	TGGTGTGTTT	2160
	GGATCTATCG	GAACCTCAT	GGAGGTGTGC	ACTTCTTTTT	CATCCTCACC	CTCATTGTGC	2220
	TAATCATCAC	CTATCTTTAC	TGGCAGATCA	CAGAGGGAAG	GAAGATTATG	ATAAGGCTGC	2280
	TCCATGAGCA	GATCATTAAT	GAGGGCAAG	ATAAAATGTT	CCTGATAGAA	AAATGATCA	2340
15	AGCTGCAGGA	TATGGAGAG	AAAGCAAACC	CCAGCTCACT	TGTTCTGGAA	AGGAGAGAGG	2400
	TGGAGCAACA	AGGCTTTTGG	CATTGTGGGG	AAATGATGAG	CAGTCTTGAC	TTCGATCTA	2460
	GAAGATCAGT	TCAAGAAAGT	AATCCAAGG	CCTGATGACT	CTTTTGGTAA	CCAGACACCA	2520
	ATCAATAAG	GGAGGAGGAY	GAAATGGAA	TGATTTCCTC	CATGCCACCT	GTGCCCTTAG	2580
	GAATCTGCCA	GAAGAAATCT	CAAGGCTTTA	GCCAGGAGCG	GAAACTGACT	ACCATGTAAT	2640
20	TATCAAAGTA	AAATTGGGCA	TTCCATGCTA	TTTTTAATAC	CTGGATTGCT	GATTTCCTAA	2700
	GACAAATAC	TTGGGTTTTT	CCAATAAAGA	TTGTTGTAAT	ATTGAAANRA	RMMAMAAAA	2760
	ACCTAGGAG	AGATAACTAG	GGATAATGT	ATATTATCTT	CAGAGAGTGT	GTGCAGGAAT	2820
	GATTGGTTCT	TAGAAATCTC	TCTTGCCAGA	CTTCCAGAC	CTGGCAAGG	TTTAGAAACT	2880
	GTGCTAAGA	AAAGTGGTCC	ATCCTGAATA	AACATGTAAT	ACTCCAGCAG	GGATGTGAAG	2940
25	CCTCTGAATT	GTAGAACTG	CATTATTG	TGACTTTGAA	CTAAAGACAT	CCCCATGTC	3000
	CCAAAGTGG	AATACACCA	GAGGTCTCAT	CTCTGAACCT	TCTTGCTTAC	TGATTACATG	3060
	AGTCTTTGGA	GTCCGGGATG	GAGGAGGTTC	TGCCCTGTG	AGGTGTTATA	CATGACCATC	3120
	AAAGTCTTAC	GTCAAGCTAG	CTTTGCAGTG	GCAGTACCGT	AGCCAAATGAG	ATTATCCGA	3180
	GACGCBATTA	TGCTAATTG	GAAATTTTCC	CAATACCCCA	CCGTGATGAC	TTGAAATATA	3240
30	ATCAGCGCTG	GCAATTTTTG	ACAGTCTCTA	CGGAGACTGA	ATAAG		3285

Seq ID NO: C205 DNA Sequence
Nucleic Acid Accession #: NM_002250.1
Coding sequence: 397..1680

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	GTCTCTGGT	GTCTGGGTGT	GGTGAGTAGA	GGTGTGTGTC	ACAAAGTACA	GACCATTTGTG	60
	TGTGACAAAG	CCCATCTGT	GTCTGTGTGT	GTCTTTATCC	ACGTGGATGG	ACGTCTCTTT	120
40	CTTGCTCTGC	CCCAAGACAC	ACCCTAGCCC	CTCCTTATTC	TCAAAGGGG	GAGCTGGGA	180
	GCTCTCCCTC	ACCTTGGGGC	CTCCCTGCCC	CCTCCCTGCC	CTGCTTGGCC	GTCCACACTC	240
	CCAGAGGGC	ACAGGGCTCT	GCTGTGCTTC	AGAGCAAAAG	TCCAGAGGCC	AGCAGAGCAG	300
	GCTGACGACC	TGCAAGCCAC	AGTGTGCTGC	CTGTGGTGGC	TGGGAGGTGG	GGGACCTGG	360
	GCAGGAGCT	GGCTGAGCCC	CAAGACCCCG	GGGGCCATGG	GCGGGGATCT	GGTGTCTGGC	420
45	CTGGGGGCT	TGAGAGCCCG	AAAGCCCTTG	CTGGAGCAGG	AGAACTCTCT	GGCCGGCTGG	480
	GCATCTGTGC	TGGCAGGAAC	TGGCATTTGA	CTCATGTTGC	TGCATGCAGA	GATGTCTGTG	540
	TTGGGGGGGT	GCTCTTGGGC	GCTCTACCTG	TTCTTGGTTA	AAAGCAAGAT	CAGCATTTCC	600
	ACCTTCTTAC	TCCTCTGGCT	CATCTTGGCC	TTTCATGCCA	AAGAGGTCCA	GCTGTTCATG	660
	ACCBACACAC	GGCTGTGGGA	CTGGCTGGTG	GCGCTGACCG	GGCGGCAGGC	GGCGCAGATC	720
50	GTGCTGGAGC	TGGTGTGTGT	TGGGCTGCAC	CCGGCGCCCG	TGGGGGGCCC	GCGGTGCTGG	780
	CAGGATTTAG	GGGCGCCGCT	GACCTCCCTG	CAGCCCTGGC	CGGATTTCCCT	GGCCCAAGGG	840
	GAAGGCTGTC	TGTCCCTGGC	CATGCTGCTG	CGTCTCTACC	TGGTGCCCTG	CGCCGTGCTC	900
	CTGGCGACGC	GCTCTCTGCT	CACGCTTCC	TACGCGAGCA	TGGGGCTCTC	CAATCAAGTC	960
	CGCTTCCGCC	ACTGGTTCTG	GGCCAGCTT	TACATGAACA	CGCACCCCTG	CGCCCTGCTG	1020
55	CTGGGCTTCA	CGCTTGGCCT	CTGGCTGACC	ACCGCTGGG	TGCTGTCCGT	GGCCGAGAGG	1080
	CAGGCTGTTA	ATGCCACTGG	GCACTTTTCA	GACACACTTT	GGCTGATCCC	CATCACAATC	1140
	CTGACCATCG	GCTATGGTGA	CGTGGTGGCG	GGCACCATGT	GGGGCAGBAT	CGTCTGCTTG	1200
	TGCACTGGAG	TCATGGGTGT	CTGCTGCACA	GCCCTGTGG	TGGCCGTGGT	GGCCCGGAAG	1260
	CTGGAGTTTA	ACAGGGCAGA	GAAGCACGTG	CACAACTTCA	TGATGGATAT	CCAGTATACC	1320
60	AAAGAGATGA	AGGATCTCCG	TGCCCGAGTG	CTACAGAGAG	CCTGGATGTT	CTACAAACAT	1380
	ACTGCGAGGA	AGGAGTCTCA	TGCTGCCCGC	AGGCATCAGC	GCAGCTGCT	GGCCGCCATC	1440
	AACGGTTTCC	GCCAGGTGCG	GCAGAAACAC	CGGAAGCTCC	GGGAACAGT	GAATCTCATG	1500
	GTGGACATCT	CCAAGATGCA	CATGATCTTG	TATGACCTGC	AGCAGAACTC	GAGCAGCTCA	1560
	CACCGGGCCC	TGGAGAAACA	GATTGACACG	CTGGCGGGGA	AGCTGGATGC	CCTGACTGAG	1620
65	CTGCTTAGCA	CTGCCCTGGG	GCGGAGGCGG	CTTCCAGAAC	CCAGCCAGCA	GTCCAAGTAG	1680
	CTGGACCCAC	GAGGAGGAAC	CAGGCTACTT	TCCCCAGTAC	TGAGGTGGTG	GACATGCTCT	1740
	CTGCCACTCC	TGACCCAGCC	CTGAACAAAG	CACCTCAAGT	GCAAGGACCA	AAGGGGGCCC	1800
	TGSCCTTGGAG	TGGGTTGGCT	TGCTGATGGC	TGCTGGAGGG	GACGCTGGCT	AAAGTGGGTA	1860
	GGCCTTGGCC	CACCTGAGGC	CCCAAGTGGG	AACATGGTCA	CCGCCACTCT	GCAATACCTC	1920
70	ATCAAAAACA	CTCTCACTAT	GCTGCTATGG	ACGACCTCCA	GCTCTCAGTT	ACAAGTGCAG	1980
	GCGACTGGAG	CGAGGACTCC	TGGGTCCTTG	GGAAAGAGGG	TACTAGGGGC	CCGGATCCAG	2040
	GATTCTGGGA	GGCTTCAGTT	ACCGCTGGCC	GAGCTGAAGA	ACTGGGTATG	AGGCTGGGGC	2100
	GCGGCTGGAG	GTGGCGCCCC	CTGGTGGGAC	AACAAAGAGG	ACACCAATTT	TCCAGAGCTG	2160
	CAGAGAGCAC	CTGGTGGGGA	GGAGAGAGTG	TAACTCACCA	GCCTCTGCTC	TTATCTTTGT	2220
75	AATAATGTT	AAAGCCAG					2238

Seq ID NO: C206 DNA Sequence
Nucleic Acid Accession #: NM_025257.1
Coding sequence: 1..2139

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	TTCCCTGCTCT	TCATTCATGG	TTACATCGTG	GTGGGGATTG	TGGCTCGGTT	GTATGGAGAC	180

5 CCCCAGGCAAG TCCTCTACCC CAGGAACCTCT ACTGGGGCTT ACTGTGGCAT GGGGGAGAAC 240
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 CCGGAGGACC CATGGACTGT GGGAAAAAAC GAGTTCACAC AGACTGTGG GGAAGTCTTC 420
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 TGCTTTCCAT GGACCAACAT TACTCCACCG GCGCTCCAG GGTACACCAA TGACACCACC 600
 ATACAGCAGG GGATCAGCGG TCTTATTGAC AGCCTCAATG CCGAGACAT CAGTGTAAAG 660
 10 ATCTTTGAAG ATTTTGCCCA GTCCCTGGTAT TGGATTCTTG TTGCCCCGGG GGTGGCTCTG 720
 GTCTTGAGCC TACTGTTTAT CTGCTTCTG GCGCTGGTGG CTGGGCCCTT GGTGCTGGTG 780
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 15 GCGATCTGTC TGCTGGTCT CATCTTCCTG CGGCAGCGGA TTCGTATTGC CATGCCCTTC 1020
 CTGAAGGAGG CCAAGCAAGG TGTGGGACAG ATGATGTCTA CCATGTCTA CCACTGGTTC 1080
 ACCTTGTGCC TCCTCTCTCAT CTGCATTGCC TACTGGGCCA TGACTGCTCT GTATCTCTCTG 1140
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 CCCAGGACA TCCTTACCTT CCGCTTAATC TCTGCTTCA TCCGCACACT CGTGTACCAC 1500
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 25 TTGAGTATA TTGACCAAA GCTCAGAGGA GTGCAGAAC CTGTAGCCCG CTGCATCATG 1620
 TGCTGTTTCA AGTGTGCGCT CTGGTGTCTG GAAAAATTTA TCAAGTTCCT AAACCGCAAT 1680
 GCATACATCA TGATCGCCAT CTACGGGAAG AATTTCCTTG TCTCAGCCAA AAATGCGTTC 1740
 ATGCTACTCA TGCGAAACAT TGTCAAGGTG GTGTCTCTGG ACAGAGTTCAG AGAGCTGCTG 1800
 CTGTCTCTTG GGAAGCTGCT GGTGCTCGGA GCGGTGGGGG TCCTGTCTCT CTTTTTTTTC 1860
 30 TCCGCTCGCA TCCGCGGCTT GGTAAAGAC TTTAAGAGCC CCAACCTCAA CTATTACTGG 1920
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 GGCTCCCTCG ACCGCGCTTA CTACATGTCC AAGAGCTTCT TAAAGATTCT GGGCAGGAAG 2100
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 35 ACTGCACCCC ACCCGCACCG TCAGCCATC CAACCTCAT TCGCTTACA GGTCTCATT 2220
 TTGTGTAATA AAGAGGTTT AGGCCAGGCG CCGTGGCTCA GCGCTGTAAT CCAACACTTT 2280
 GAGAGGCTGA GCGCGCGGGA TCACCTGAGT CAGGAGTTCG AGACCAGCCT GGCACACATG 2340
 GTGAAC 2347

Seq ID NO: C207 DNA Sequence
 Nucleic Acid Accession #: NM_016180.1
 Coding sequence: 26..1618

45 1 11 21 31 41 51
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 CAGCAGACTC ATCAGTCACA GCATGGCCAT GTTGGGAAGA GAGTCTGCT ACGCGGTGGA 180
 GGCAGCGTAT GTGACCCAG TCCTGCTCAG CGTAGGTCTG CCCAGCAGCC TGTACAGCAT 240
 50 TGTGTGTTTC CTGAGCCCA TCCTGGGATT CCGCTGCGAG CCCGTGGTGG GATCGGCGAG 300
 CGACCACTGC CGGTCCAGGT GGGCGCGCGG GAGACCTTAC ATCTTACCCC TGGGAGTCAT 360
 GATGCTCTGT GGCATGGCTC TGTACCTCAA TGGGGCTACT GTTGTAGCAG CTTTGTATTG 420
 TAAACCAAGG AGAAGCTGG TTTGGGCCAT AAGTGTACAC ATGATAGGTG TCGTTCCTCT 480
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 55 CCATCAGGAC AAGGAGAAG GCGTCCACTA CCAATGCGCT TTCACAGGTT TTGGAGTGTG 600
 CCGGGTTTAC CTTTGGGGTG CTATAGACTG GCGCCATCTG GAGCTGGGAA GACTGTGGG 660
 TACAGAATTC CAGGTATGCT TCTTCTCTCT TGCTATGGTG CTCACCTTGT GTTTACTGT 720
 TCTATCTGTG AGTATCTCTG AAGCCCTCAT TCAGAGGTT GCAAGGGGCA TTCCCCACA 780
 GCAACCCCTT CAGGACCTCT CATGTCTATC AGATGGAATG TACGATATG GTTCTATCGA 840
 60 GAAAGTTAAA AATGTTTACG TAAATCCAGA GCTGGCAATG CAGGAGACAA AAAACAAAAA 900
 TCATGCTGAA CAGACTCGCA GGGCAATGAC ATTAAAGTCA CTGCTGAGAG CACTGTGAA 960
 CATGCCCTCT CACTACCGCT ACCTTTGCAT CAGCCACCTC ATTGGATGGA CGGCTTCTCT 1020
 GTCCAACATG CIGTCTTCA CAGATTTCAT GGGCCAGATT GTGTACCGCG GGGATCCCTA 1080
 TAGTGCACAC AACTCCACAG AGTTTCTCAT CTACGAAGA GGAGTCGAGG TTGGATGTG 1140
 65 GGGCTTCTGC ATCAACTCG TGTTTTCTCT ACTTTATTCT TACTTTCAGA AAGTTTGGT 1200
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 TGTAAATGTC AGCACCCCTG ACATGTGCC CTTTAACTCT ATTACTGAGT ACCACCGGGA 1380
 GGAAGAAAG GAGAGGCGAG AGGCCCCAGG AGGGGACCCA GACACACGCG TGAGAGGGA 1440
 70 GGGCATGGAC TGGGCCACCC TCACATGCTT GGTGCAGCTG GCTCAGATCC TGGTCGGAGG 1500
 TGGCTGGGC TTCTGTGTC ACACAGCCGG GACCGTGTG GTCTGTGTA TCACAGGCTC 1560
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 CAATAAGAG ACAATGACCC TAAAAAAA 1650

Seq ID NO: C208 DNA Sequence
 Nucleic Acid Accession #: NM_003273.1
 Coding sequence: 255..2024

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 CCCACTCAGG CCGCGGGGCC CCGCTGGAAT TCGGAGGGCC CCTGGGTAAT GGGCGAGAGA 180
 GATGGGACCT GGGGCAAGG CTAGCGAAG GAGAGCTGGA GCGGGTGAAC TAAGAGCGGG 240
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GACTAAGATG GACGCTCGGG AAGGGAACTG GAGGGCAGCG GGGTGCCTGG GGGCGGAGGG 480
CTGAGGACGG GGTGCGGAGG CGCACTCTGG GAATGCCGAG AGGGTCCCGC AGAGACGTCA 540
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GAGCGAATG GGCTCGCGCA GGGAAAGGAC GCCCGGGGCC TTATCAGAGC CCCCTTGGAC 900
CGCGAGTGGC CGAGGGGCGG GAATTGAAGG ACAAGAGTCG CTGCGCTAT OCTATTAACG 960
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CTCTGGGGGG GCTCCCGGAA ATGCTCTCTG CCTTGGGGTT TGTTCGCAAC CTCACGCTT 1080
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CCTTGCCTCG CGGGGTGTCA CACCTGCTGC CCTACTCTA CCTCCCTAC TTCACCGGCG 1800
TGCTGGTGA CCGTGGGCCG CGGATGAGC GAGTGGCTG CAGAAGTACG GCGTGGCTG 1860
GCAGGAGTAC TGCCGCGCTG TGCCCTACCG CATCATGCCC TACATCTACT GAAGCGGCTC 1920
CACCAACCCA GGTGGGGCAT GTGCCACTC ATCCACAGC ACACCCAGGA CCAGGAGCCT 1980
CGACACACTT GGGACATCAG GCCTTGCAAC CCACCCAGCC CTGAGGATGA ACAACCTCAG 2040
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Seq ID NO: C209 DNA Sequence
 Nucleic Acid Accession #: NM_015720.1
 Coding sequence: 21..1838

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Seq ID NO: C210 DNA Sequence
 Nucleic Acid Accession #: NM_001197.3
 Coding sequence: 61..543

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GAATAGATTC CGAGGAGCAG GAGTGCTCAA TAAATGTTG GTTTCAGCA AAAAAAATA 960
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Seq ID NO: C211 DNA Sequence
Nucleic Acid Accession #: AF272357
Coding sequence: 83..1060

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CGCCGCGCAC CCGATGTAG CCCTCTGTCC CGGAGGCTCG GACTGTGCCC TGAAGAGGCG 240
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GGAGCCCGCG GAGGGGCAAG GCGAGCGCCT CGCCCTGTGG CTGATCCTGG CGTCTGTGT 660
GGCGGCTGCA GCGGCCCTCT CCTAGCTTC CCTCTGCTGG TGCAGGCTGC AGCGTGAGT 720
CGCCCTGACT CAGAGGGCGG ACTACGCCAC TCGAAGGCC CCTGCTCAC CTGCAGCTCC 780
CGGATCTCG CCTGGGACC AGCGCTGGC ACAGAGCGCG GAGATGTACC ACTACAGCA 840
CCAGCGGCAA CAGATGCTGT GCTGGAGCG GCATAAAGAG CCACCCAGG AGCTGGACAC 900
GGCCTCTCTG GATGAGGAGA ATGAGGACCG AGACTTCAG GTGTACAGGT GCGCGGCGCT 960
GGCCCTGACC GCGGCCATGG AGGTGCGCAA CCTCTGTTC GACCAAGCG CACTGTCCCG 1020
GCGCCCTGCG GCGCCAGCT CACGCGCTGC ACTGCCATGA CCTGGAGGCA GACAGAGGCC 1080
CACTGCTCC GCGACCTCGA GCGCCCGCG GAGGGGCGG GCTGGAGCT TCCACTAAA 1140
AACATGTTTT GATGCTGTGT GCTTTTGGT GGGCCTCGGG CTCCAGGCC TGGGACCCCT 1200
TGCCAGGAG ACCCCCGAAC CTTTGTGCCA GGACACTCC TGGTCCCTCG CACCTCTCT 1260
GTTGGTTTA GACCCCAAAC CTGAGGGGG CATGGAGAAC CGTAGAGCG AGGAACGGGT 1320
GGTAATTCT AGAGACAAA GCCAATTAAA GTCCATTCA GAAAAAATA A 1371

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Seq ID NO: C212 DNA Sequence
Nucleic Acid Accession #: NM_004445.1
Coding sequence: 799..3819

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1 11 21 31 41 51
| | | | |
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GACCCCGGAC CCAGCTTGGC GACGCGGATT CTGACGCGG GCGCCCAAGG TCTCCCGGC 120
GCCCCACTCT TGGAGCAGCC CCTGCCCCA GCGTCAGGTC CACCCCGGAA TCCGAGGAGC 180
TCTCGCGCGC GAAACGACCC GCGCGGCTGC AACGGGTGCC CCGGACTGGA GAAGACGCG 240
GTGGCACCGT GCGAGCTCCA GGAGCCCGCG GTCCACTGCG AGGCTCTCGG GGGCGCAGAC 300
CTGCAGAGAC TGCGCCACAC GGAAGAAAT AAAGGGATTA TAGTCCACCC AATTACAGA 360
CTTCTGAGAC TCAGACAGA GGAGAGATAG AGAACCGCCA ATCTCTAGAT CAACAAGCAA 420
AGGAGGTGCC AAGCCTGTGT GTCTTCATTG TGACACTGGA GTCTAGATGC TGGGAAGTCC 480
AAGATCAGGG TCGCGCATG GTCTGTTCTT GCGGAGCCT CTCTCTAGG TTTGAGACTG 540
CCCTCTCTCT TGTGTGTGTC TCGAATGGCA GAAAAGGGG TGGCTGTTGG AGGAAGGGAG 600
GAGAGTAAAT GAAGAGAAAG AACTGGAATA ACCCTTGCA GAAAAAATA AAAAGGGAG 660
CTTAGCTGTA CACCTGAGT CTTGCAAAAG CTGCAGCCCC ACCCAGGAGC AGGGTGGTGG 720
CTGGGGCGAT GGTGGACGCC CTGAAGATGT CCGATGGCTA CTGAAGGGGC TGCCAGTTA 780
GGGAACAGAG TGGCGGCAT GGTGTGTAGC CTATGGGTGC TGCTCTGCTG GTCTTCAGTT 840
CTGGCTCTGG AAGAGGTATT GCTGGACACC ACCGGAGAGA CATCTGAGT TGGCTGGCTC 900
ACCTACCCAC CAGGGGGGTG GGCAGAGGTG AGTGTCTTGG ACAGCCAGCG ACGCCTAGCT 960
CGGACCTTGG AGGCATGTCA TGTGCGAGGG GCGCCTCCAG GCACCGGGCA GGACAATTGG 1020
TTGAGACACG ACTTGTGCG GCGGCGCGGG GCGCAGAGGG CGCATTTCG ACTCCACTTC 1080
TCTGTGCGGG CATGCTCCAG CCTGCTGTGG AGCGGCGGCA CCGCGCGGGA GACTTTCACC 1140
CTTTACTACC GTGAGGCTGA GGAGCCCGAC AGCCCTGACA GCGTTTCTCT CTGGCAGCTC 1200
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GCTGAGCTGC AACTGAAGGT CAAAGAGCGG AGCTTTGGGC CTCTACCCA ACAGCGCTTC 1380
TAGCTGGCTT TCGAGGACAC GGGGCGCTGC CTGGCCCTGG TCGCTGTAG GCTCTTCTCC 1440
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GAGGATGAGG TAGGGGGCCA GGCAGAGGCG AGCCCCCA GCGTGCAGTG CAACGGGGAG 1620
GGCAAGTGA TGTAGCTGT CCGGGGCTGC GCGTCCAGC CTGGATACCA ACCAGCACGA 1680
GGAGACAGG CCGCCACAGC CTGCCACGG GCGCTCTATA AGTCTTCTGC TGGGAATGCT 1740
CCCTGCTCAC CATGCCCTGC CCGCAGTCAC GCTCCCAACC CAGCAGCCCC CGTTTGGCCC 1800
TGCCCTGAGG GCTTCTACCG GCGCAGTTC GACCCACAG AGGCCCCCTG CACTGGTCTC 1860
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5	CGCCTGCCTC	GGGAGCTGGG	GGGTGAGGG	GACCTGCTCT	TCAATGTGCT	GTGCAAGGAG	1980
	TGTBAAGGCC	GCCAGGAACC	TGCCAGCGGT	GGTGGGGGCA	CTGTGCACCG	CTGCAGGGAT	2040
	GAGGTCCACT	TGCACCTTCG	CCAGAGAGGC	CTGACTGAGA	GCCGAGTGT	AGTGGGGGGA	2100
	CTCCGGGCAC	ACGTACCTTA	CATCTTAGAG	GTGCAGGCTG	TAAATGGGGT	GTCTGAGCTC	2160
	AGCCCTGACC	CTCCTCAGGC	TGCAGCCATC	AATGTGAGCA	CCAGCCATGA	AGTCCCTCT	2220
	GCTGTCCCTG	TGGTGCACCA	GGTGAGCCGG	GCATCCAAAC	GCATCACGGT	GTCTGGCCCG	2280
	CAGCCCGACC	AGACCAATGG	GAAATCCTTG	GACTATCAGC	TCCGCTACTA	TGACCAAGCA	2340
	GAAGACGAAT	CCCACCTCTT	CACCTTGACC	AGCGAGACCA	ACACTGCCAC	CGTGACACAG	2400
10	CTGAGCCCTG	GCCACATCTA	TGGTTTCAG	GTGCGGGGCC	GGACTGCTGC	GGGCCACGGC	2460
	CCCTACGGGG	GCAAGTCTTA	TTTCCAGACA	CTTCCTCAAG	GGGAGCTGTC	TTCCTAGCTT	2520
	CCGGAAGAGC	TCTCTTGGT	GATCGCTCC	ATCCTGGGG	CTTTGGCCCT	CCTCCTGCTG	2580
	GCAGCCATCA	CGGTGCTGGC	GGTCTCTTC	CAGCGAAGC	GGCGTGGGAC	TGGCTACACG	2640
	GAGCAGCTGC	AGCAATACAG	CAGCCCAAGG	CTCGGGGTGA	AGTATTACAT	CGACCCCTCC	2700
15	ACCTACGAGG	ACCCTGTCA	GCCCATCCGA	GAACTTGCCC	GGGAGTCCGA	TCCTGCTTAT	2760
	ATCAAGATTG	AGGAGTCAAT	TGGGACAGGC	TCTTTTGGAG	AAGTGCACCA	GGGCCGCTTG	2820
	CAGCCAGGAG	TCTCTTGGT	GCAGACTGTG	GCCATCCAGG	CCTGTGGGCG	CGGGGGCCCG	2880
	GAAAGCCTGC	AGATGACCTT	CCTGGGCCGG	GCCGAGTGC	TGGGTGAGTT	CCAGCACCCC	2940
	AACATCCTGC	GGCTGGAGGG	CGTGGTCACC	AAGAGCCGAC	CCCTCATGCT	GCTGACGGAG	3000
20	TTGATGAGAG	TTGGCCCTCT	GGACAGCTTC	CACAGGCAGC	GGGAGGGCCA	GTTCAGCAGC	3060
	CTGCAGCTGG	TGGCCATGCA	GCGGGGAGTG	GCTGCTGCCA	TGCAGTACCT	GTCCAGCTTT	3120
	GCCTTCTGTC	ATCGCTGGT	GTCTGCCAC	AGCCTGCTGG	TGAATAGCCA	CTTGGTGTGC	3180
	AAGTGGGCC	GTCTTGGCCA	CAGTCTCAG	GCCCCAAGTT	GTITGCTTCG	CTGGCAGCC	3240
	CCAGAGGTCA	TTGCACATGG	AAAGCATACA	ACATCCAGTG	ATGTCTGGAG	CTTTGGGATA	3300
25	CTCATGTGGG	AAGTGTGAG	TTATGGAGAA	CGCCTTACT	GGGACATGAG	TGAGCAGGAG	3360
	GTACTAAATG	CAATAGAGCA	GGAGTTCCGG	CTGCCGCCCG	CTCCAGGCTG	TCCTCCTGGA	3420
	TTACATCTAC	TTATGTGGGA	CACCTGGCAG	AAGGAACGTG	CCCGCGGCC	TCATTTTGAC	3480
	CAGCTGTGGG	CTGCATTGGA	CAAGATGATC	CGCAAGCCAG	ATACCTTGCA	GGCTGGCGGG	3540
	GACCCAGGGG	AAAGGCTTTC	CCAGGCCCTT	CTGACCCCTG	TGGCCCTGGA	CTTTCTCTGT	3600
30	CTGAGTCAAG	CCAGCCCTTG	GCTTTCAGCC	ATTGAGCTGG	AGTGTACCA	GGACAACCTC	3660
	TCCAAAGTTG	GCTCTGTATC	CTTCAGTAT	GTGGCTCAGC	TGAGCTTACA	AGACCTGCTC	3720
	GCCTTGGGCA	TCCAGTGGC	TGGCCACCAG	AAGAACTGTC	TGCAACACAT	CCAGCTCCTT	3780
	CAGCAACACC	TGAGGCGACA	GGGCTCAGTG	GAGGTCTGAG	AATGACGATA	CCGTGACTTC	3840
	AGCCCTGGAC	ACTGGTCCGA	GAAGGGACAT	GTGGGACGTG	AGCCGGGCTC	CAACAGCCCTC	3900
35	TGTGAGAGAT	GCCTCCACAC	AAACCCACCC	CTCCCGATGG	CTGCATTCCC	TGGTCTCCG	3960
	CCTCTCCACC	AGCCCTCTCC	TCATTAAAGG	GAAAGAAAGG	AATTTGCAAA		4010

Seq ID NO: C213 DNA Sequence
Nucleic Acid Accession #: XM_043340.4
Coding sequence: 195..1067

40	1	11	21	31	41	51	
	GGGCGGCGCC	CAATGGGCTG	CGCGGAGCGT	CACCTCCCGG	CAGCGGAGG	CGAGTGGGGA	60
45	GTGGGAGTGG	CGGAGTGTCA	GGGGGGCGGC	CGGCGGGGGC	GGGCGGGCGG	GAGGAGGCGT	120
	TGGCAGCGGG	CTGGGACCCA	CGCGGGCGCG	CGGCGCGGCT	GGCCTGCAGC	GCTCCACCCC	180
	CGCGCGGGGG	CAGAGTGCOC	TTTGACTTCA	GGAGGTTTGA	CATCTACAGG	AAGGTGCCCA	240
	AGGACCTTAC	GCAGCCAAAG	TACACCGGGG	CCATTATCTC	CATCTGCTGC	TGCTCTTCA	300
	TCCTCTTCTT	CTTCTCTCTG	GAGCTCACCG	GATTTATAAC	GACAGAAGTT	GTGAACGAGC	360
50	TCTATGTGGA	TGACCCAGAC	AAGGACAGCG	GTGGCAAGAT	CGACGTGAGT	CTGAACATCA	420
	GTTTACCCAA	TCTGCACTGC	GAGTGTGTTG	GGCTTGACAT	TCAGGATGAG	ATGGGCGAGC	480
	ACGAAAGTGG	CCACATCGAC	AACCTCCATGA	AGATCCCGCT	GAAACATGGG	GCAGGCTGCC	540
	GCTTGGAGGG	GCAGTTTACG	ATCAACAGG	TCCCGGCAA	CTTCCAGCTG	TCCACACACA	600
	GTGCCACAGC	CCAGCCACAG	AAOCCAGACA	TGACGCAATG	CATCCACAG	CTCTCCTTTG	660
55	GGGACACGCT	ACAGGTCCAG	AACATCCACG	GAGCTTTCAA	TGCTCTCGGG	GGAGCAGACA	720
	GACTCACCTC	CAACCCCTTG	GCTTCCACAG	ACTACATCTC	GAAGATTGTG	CCACCGGTTT	780
	ATGAGGACAA	GAGTGGCAAG	CAGCGGTACT	CCTACCACTA	CAGGGTGGCC	AACAGGGAAT	840
	ACGTGCGCTA	CAGCCACAGC	GGCGGCATCA	TCCCTGCAAT	CTGGTTCCGC	TAGACCTCA	900
	GCCCCATCAC	GGTCAAGTAC	ACAGAGAGAC	GGCAGCCGCT	GTACAGATTG	ATCACCAACA	960
60	TCTGTGCCAT	CATTGGCGGG	ACCTTCACCG	TGGCGGCAT	CCTGGACTCA	TGCATCTTCA	1020
	CAGCCTCTGA	GGCTGGGAAG	AAGATCCAGC	TGGGCAAGAT	GCATTTGACG	CACACCCAGC	1080
	CTAATGGCCG	AGGACCTTGG	GCATCGCCAG	CCTTGCTTCC	AGTGGCCCTGT	CTCTTTTGGC	1140
	CCTCAATCTG	GTCCCAAATC	TGGCTGTGTC	CCAAAGGGTG	TGTGGGAAGT	GGGGGGAAG	1200
	TAGAGGATGG	CTCGATGTTT	TGCAGCTACC	TCTTTTCCCC	GTGTTTCTTT	TTAGACAAAT	1260
65	TACACTGCCT	GAAGTTCAG	TTCCCTTTTC	CCTGGGGAGC	CCCAAGAAC	GAGTCAGGCA	1320
	AGGGGTGGGG	AGTCCAGGGG	AACATCCAG	AATGCATATC	GATCAGCTCT	CAGCCAGGCT	1380
	TGACAAATCT	CGCAGCCCCC	ACTAGGTGGA	CACATTAATG	ATTGAGTTTC	TCCCTTGGGC	1440
	AGCCACCTGT	CCACAGAGGC	ACCAGACCTG	GGCTTTCAGC	TTTGGGACCA	GGCTGCCCAA	1500
	AGGTACTCTG	TTATACACCC	GGCACCCTTC	ACGAAAGATG	GTACTTCCCA	AGCAAGCCCC	1560
70	TATGATTTGT	CACATATAGT	GGAAATGTGT	GGCATGCACA	TGAGTTGAAA	TTCTTTTATG	1620
	CATTTTITTT	AGAAAAAATA	AAAAACAAC	TCTGAGGACA	TAGGGGATGT	CAGTTTCTTA	1680
	TGGAGAGAGC	ACCTCTGACC	CGTATTCTTT	ATAATCAAAA	TCTGAAGGGA	AAAAAATGTT	1740
	TTAGTTCTTT	CCCCACTCGT	TGGGTTCAAC	TAGATTAATA	GGCTGATTTT	CAG	1793

Seq ID NO: C214 DNA Sequence
Nucleic Acid Accession #: NM_002151.1
Coding sequence: 246..1499

80	1	11	21	31	41	51	
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	AGGCCCAAGC	CCACGCGCTC	TGCTTCCAGG	CGGCGGCGTG	CTGCGGGGCC	ACCATGCTCC	120
	TGCCAGGGCC	TGGAGCATGA	CCGACCCCGG	GCACTACCTC	GAGGCTCCGC	CCCCACCTGC	180
	TGAGACCCAG	GCTCCACACC	TGGCCAGGGA	GGTCAGCCAG	GGAATCAITA	ACAAGAGGCA	240
	GTGACATGGC	GCAGAAAGGAG	GGTGGCCGGA	CTGTGCCATG	CTGCTCCAGA	CCCAAGGTGG	300

5	CAGCTCTCAE	TGCGGGGACC	CTGCTACTTC	TGACAGCCAT	CGGGGCGGCA	TCCTGGGCGA	360
	TTGTGGCTGT	TCTCTCTCAG	AGTGACCAGG	AGCCGCTGTA	CCCAAGTCAG	GTCCAGCTCTG	420
	CGGACGCTCG	GCTCATGGTC	TTTGACAAGA	CGGAAGGGAC	GTGGCGGCTG	CTGTGCTCCT	480
	CGCGCTCCAA	CGCCAGGGTA	GCCGGAATCA	GCTGCGAGGA	GATGGGCTTC	CTCAGGGCAC	540
	TGACCCACTC	CGAGCTGGAC	GTGGGAACGG	CGGGCGCCAA	TGGCAGCTCG	GGCTCTCTCT	600
	GTGTGGACBA	GGGAGGCTG	CCCCACACCC	AGAGGCTGCT	GGAGGTCATC	TCCGTGTGTG	660
	ATTGCCCCAG	AGGCGCTTTC	TTGGCCGCCA	TCTGCCAAGA	CTGTGGCCGC	AGGAAGCTGC	720
	CCGTGGACCG	CATCGTGGGA	GGCCGGGACA	CCAGCTTGGG	CCGCTGGCCG	TGGCAAGTCA	780
10	GCCTTCGCTA	TGATGGAGCA	CACCTCTGTG	GGGATCCCTT	GCTCTCGGGG	GACTGGGTGC	840
	TGACAGCGCG	CCACTGTCTC	COGGAGCGGA	ACCGGCTCCT	GTCCGATGCG	CGAGTGTGTT	900
	CGGTGGCGCT	GGCGAGGCTC	FTCCGCCAAG	GTCTGCAGCT	GGGGGTGCAG	GCTGTGGTCT	960
	ACCACGGGGG	CTATCTTCCC	TTTGGGGACC	CCAACAGCGA	GGAGAACAGC	AACGATATTG	1020
	CCCTGGTCCA	CCTCTCCAGT	CCCTGCCCCC	TCACAGAAAT	CATCCAGCCT	GTGTGCCCTC	1080
15	CAGCTGCGCG	CCAGGCGCTG	GTGGATGGCA	AGATCTGTAC	CGTGACGGGC	TGGGGCAACA	1140
	CGCAGTACTA	TGGCCAAACG	GCCGGGGTAC	TCCAGGAGGC	TCCAGTCCCC	ATAATCAGAG	1200
	ATGATGTCTG	GAGTGGGCTC	GACTTCTATG	GAAACCCAGT	CAGGCCAAGG	ATGTTCTGTG	1260
	CTGGCTACCC	CGAGGGTGGC	ATTGATGCCCT	GCCAGGGCGA	CAGCGTGGGT	CCCTTTGTGT	1320
	GTGAGGACAG	CATCTCTCGG	ACGCCACGTT	GGCGGCTGTG	TGGCATTTGT	AGTTGGGGCA	1380
20	CTGGCTGTGC	CCTGGCCCGA	AAGCCAGGGC	TCTACACCAA	AGTCAGTGAC	TCCCGGAGT	1440
	GGATCTTCCA	GGCCATAAAG	ACTCACTCCG	AAGCCAGCGG	CATGGTGACC	CAGCTCTGAC	1500
	CGGTGGCTCG	TGCTTGGGCA	GCCTCCAGGG	CCCGAGGTGA	TCCCGGTGGT	GGGATCCAGG	1560
	CTGGGCGGAG	GATGGGAGCT	TTTTCTTCTT	GGGCCCCGTC	CACAGGTCCA	AGGACACCTT	1620
	CCCTCCAGGG	TCCCTCTCTC	CACAGTGGCG	GGCCCACTCA	GCCCGAGAGC	CACCCACCTT	1680
25	CACCTCCTCG	ACCCCATGTT	AAATATTGTT	CTGCTGTCTG	GGATCTCTGT	CTAGGTGCCC	1740
	CTGATGATGG	GATGCTCTTT	AAATAATAAA	GATGGTTTGG	ATT		1783

Seq ID NO: C215 DNA Sequence

Nucleic Acid Accession #: AB037745.1

Coding sequence: 25..1744

30	1	11	21	31	41	51	
	ATGGTGGAA	ACGCTGCCCA	CAACATGGA	AACGACCGTT	CTCAGTGGGA	TCAACTTCGA	60
35	GTACAGGGC	ATGACAGGCT	GGGAGGTGGC	TGGTATCAC	ATTATACAC	CTGCTGGAGC	120
	CTCAGACAA	GACTTCATGA	TTCTCACTCT	GTTGTGCCA	GGATTAGAC	CTCCGAGTTC	180
	GGTATGCA	GACACAGAGA	ATAAGAGGT	GGCCAGAAATC	ACATTTGTCT	TTGAGACCTC	240
	CTGTCTGTG	AATGTGAGC	TCTACTTCAT	GGTGGGTGTG	AATTTCTAGGA	CCAACACTCC	300
	TGTGGAGACG	TGGAAGGTT	CCAAAGGCAA	ACAGTCCCTAT	ACCTACATCA	TTGAGGAGAA	360
40	CACATCCAG	AGCTTCACCT	GGGCCCTTCA	GAGGACCACT	TTTCATGAGG	CAAGCAGGAA	420
	GTACACCAAT	GAGGTGTCGA	AGATCTACTC	CATCAATGTC	ACCAATGTTA	TGAATGGGCT	480
	GGCCCTCTAC	TGCCGTCCCT	GTGCCCTAGA	AGCCCTCTGAT	GTGGGCTCCCT	CCGTCACCTC	540
	TTGTCTGCT	GGTACTATA	TTGACCGAGA	TTGAGGAACC	TGCCATCTCT	GGCCCCCTAA	600
	CACAATTCTG	AAAGCCACCC	AGCCTTATGG	TGTCCAGGCC	TGTGTGCCCT	GTGTCACAGG	660
45	GACCAAGAAC	AACAAGATCC	ACTCTCTGTG	CTACAAATGAT	TGCACCTTCT	CAGGCAACAC	720
	TCCACCAAGG	ACTTTCATCT	ACAACCTTCTC	CGCTTTGGCA	AACACCGTCA	CTCTGTCTGG	780
	AGGCGCAAGC	TTCACTTCCA	AAGGGTTGAA	ATACTTCCAT	CACCTTACCC	TCAGTCTCTG	840
	TGGAACCAAG	GGTAGGAAA	TGCTGTGTG	CACCGACAAT	GTCACTGACC	TCCGATTCCT	900
	TGAGGGTGG	TCAGGGTCTT	CCAAATCTAT	CACAGCCTAC	GTCTGCCAGG	CAGTCACTAT	960
50	CCCCCAGAG	GTGACAGGCT	ACGAGGCCGG	GGTTTCTTCA	CAGGCTGTCA	GGCTTGTCTG	1020
	TGCACTTATT	GGGGTGACAA	CAGATATGAC	TCTGGATGGA	ATCACCTCCC	CAGCTGAATC	1080
	TTTCCACCTG	GAGTCCCTGG	GAATACCGGA	CGTGTCTTTC	TTTTATAGGT	CCAATGATGT	1140
	GACCCAGTCC	TGCAGTCTCG	GGAGATCAAC	CACCATCCGC	GTCAAGTGTCA	GTCCACAGAA	1200
	AACTGTCCCT	GGAGGTTTGC	TGCTGCCAGG	AACGTGCTCA	GATGGGACCT	GTGATGGCTG	1260
55	CAACTTCCAC	TTCTGTGTGG	AGAGCGCGGC	TGCTTGCCCG	CTCTGCTCAG	TGGCTGACTA	1320
	CCATGCTATC	GTGAGGAGCT	GTGTGGCTGG	GATCCAGAGG	ACTACTTAAG	TGTGGCGAGA	1380
	ACCCAGCTTA	TGCTCTGTGT	GGATTTCTCT	GCCTGAGCAG	AGAGTCACCA	TCTGCAAAAC	1440
	CATAGATTTC	TGGCTGAAAG	TGGGCATCTC	TGCAGGCACC	TGTACTGCCA	TCTGTCTCAC	1500
	CGTCTTGACC	TGCTACTTTT	GGAAAAAGAA	TCAAAAACTA	GAGTACAGGT	ACTCCAGGCT	1560
60	GGTGTGAAT	GCTACTCTCA	AGGACTGTGA	CCTGCCAGCA	GCTGACAGCT	GGCCATCTAT	1620
	GGAGGCGGAG	GATGTAGAGG	AAGACCTCAT	CTTTACAGGC	AAGAACTCAC	TCTTTGGGAA	1680
	GATCAAAATCA	TTTACCTCCA	AGCAGCCAGC	TCTCTTCACT	ATCTCTCTTT	CAGAGGACTC	1740
	CTGATGGATT	TGACTCAGTG	COGCTGAAGA	CATCTCTCAG	AGGCCACAGC	ATGGACCTGT	1800
	GAGAGGCAC	GCCTGCCCTCA	CCCTGCTCCT	CACCTTGCTAT	AGCACCTTTG	CAAGCCTGGG	1860
65	GGGATTGGG	TGCCAGCATC	CTGCAACACC	CACCTGCTGA	AATCTCTTCA	TTGTGGCCTT	1920
	ATCAGATGTT	TGAATTTTCA	ATCTTTTCTT	ATAGAGTACC	CAAAACCTTC	TTTCTGCTTG	1980
	CCTCAACCT	GCCAAATATA	CCACACTTTT	GTTTGTAAAT	TATGCCCTTG	CTTGTATCTT	2040
	GTTCGCCAAA	ATGGGCCATC	CGCCAGAGCC	ATAGCTTCTG	CTGCTCATAA	TTCTTATAGC	2100
	TTTGGAAATGA	AAATATTCTT	ATCTTCTTAA	GTATAGAAAC	TATTTCTCTT	GTCTCTTAAC	2160
70	TTAAGGCGAG	AAACAGCTGG	GAGTTTCTCT	CGCATGCCCT	CAGCTCATGA	TCTCTTCAGG	2220
	AGAGAGGCTG	GGTGGAGGAG	GTGTGGGGGT	TCCCTGGTGG	ATAATCTTCA	TAGCAGCCTG	2280
	GATCCATTTT	CCTTGGATAA	CCAGCTCAAA	GGGAGTGAAA	ATGGTAGTCT	GAGGGCAAGG	2340
	GGAGCAAGGC	CTGGGTAAAG	AAAGCCTTGA	AAAGCATAAA	AAGAGGCCGG	GCCGGGTGGC	2400
	TACGCTCTGT	AATCCAGACA	CTTTGGGAGG	CCGAGGCCGG	CAGATCATGA	GGTCCGGAGA	2460
75	TTGAGACCAT	CCTGGCTAAC	ACGGTGAAGC	CCCGTCTCTA	CTGGAAATAC	AAAAAATTAG	2520
	CCGGGCGTGG	TGGCGGGTGC	CTGTGGTCCC	AGCTACTCGG	GAGGCTGAGG	CGGGAGAAAT	2580
	GGTGGGCTG	GGTGGGCTG	GCTTGCAGTG	AGCCGAGATC	GCGCCACTGC	ACTCCATCCA	2640
	GCTTGGGTGA	CAGAGTGAGA	CTCTGCCCTA	AAAAAAGAAA	AAAAAAGAAA	AAGCAAAAG	2700
	AGAGGCAACA	AGGAATGTTT	TTGTTTGTGA	GACAGGCTCT	CACCTGTCTA	CCTAGGCTGC	2760
80	AGTGCAGTGG	CGTAATCACT	GTTCAGTGCA	GCCTCAAGCT	CTTGGGCTCA	GGCTATCCTC	2820
	CCATCTCAGC	CTCTCAAGTA	GCTGGGACTA	CGAGTGTGCA	CCACGAGGCT	CACATAATTT	2880
	TGTGTTTTTC	GTAGACACGG	GGTTTCAACG	TGTTGCCGAG	GCTGGTCTCT	AACCTCCTGG	2940
	CTCAAGTGAT	CTGTCCGCTC	CGGCTTCCCA	AACCTGCTGG	ATCACAGGCA	TAAGCCACTG	3000
	CACCTCAGCT	TTTATTTGTT	TTTAAACCA	CGTAGCTCAT	TGCCTTCTCT	TAAGTAAATG	3060
	ATAGATATTC	TCACGTAAGC	CAAGGGAATA	AGTTCTATCA	GAAATATGCC	AAAGCCCTGG	3120

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TGGATACATC CTCCCTATCT TTTTITAA CTTTCCACTA TCACCTCTATG ACACTGAAAA 3180
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GACATAGCAA ACCCTGTGAG TGAGGAAAT TCCTCATCCT TGAGTGCCCC CGTCTAGAA 3300
GTTTGGGCCA TATTATGGAA CAGGGCTCTC TTATTGAAA AGAGCACAAG GAGGCCAAGA 3360
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TGAGACCTTG TCTCTAAAAA ATTTAAAAAT AAACAAGGTG TTCACCAAGC TGGGATACTT 3720
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CAGTTCTGCC TCATCAGTAA TCAGGCTAGG GTGACCTTCC CTTGGTCAAG CCCCAATTGC 4020
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TTCTGTAGCC TCAGCAATAC TTGGGCACTC GCTGTCTCAC TGAATAGCTT TCTTTTGTGA 4440
CAAGGCCAC ACAGAGCCCT TAGACTATTC CGAACAAGT AGGAAAAAT ACATATGTCT 4500
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ACTACCCCTT ACCGTGCTGA CTCTGCTAGG TCTGCCCTGT GACCTGTCTG GAACCTCTGA 4620
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CCTCCCCAGT AGCTGGGATT ACAGGCATGC GCCAACCAGC CTAGCTAATT TTTGTGTTT 4980
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TATTGATGT CACTTTTTTT TTTTGTAAA ATAAAAACAT ACCTTAC 5567

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Seq ID NO: C216 DNA Sequence
Nucleic Acid Accession #: NM_004864.1
Coding sequence: 26-952

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1 11 21 31 41 51
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ATTCCGAGAG TTGCGGAAC GCTACGAGGA CCTGCTAACC AGGCTGCGGG CCAACGAGAG 240
CTGGGAAGAT TCGAACACCG ACCCTGCTCC GSCCCTGCA GTCCGATAC TCAGCCAGA 300
AGTGCAGCTG GATCCGCGCG GCCACCTGCA CCTGCTATC TCTCGGGCG CCCTTCCGGA 360
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AAGGTGTGTA GACGTGACAC GACCGCTCGG GCGTCAGCTC AGCCTTGCAA GACCCCAAGC 480
GCCCGCGCTC CACCTGCGAC TGTGCGCGCC GCGCTGCGAG TCGGACCAAC TGCTGGCAGA 540
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TCTGCACAGC GTCCGCGCGT CCGTGAAGA CTTGGGCTGG GCGATTGGG TGTGTGCGC 720
ACGGAGGCTG CAAGTACCA TGTGATCGG CGCTGCTCCG AGCCAGTTCC GGGCGGCAAA 780
CATGCAAGCG CAGATCAAGA CAGAGCTGCA CCGCTGAAG CCGGACACGG AGCCAGCGCC 840
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GGTCTTCCA CTGTGCACT GCGCGGGGGA GCGCACTCA GTTGTCTGC CTTGTGGAAT 1020
GGGCTCAAGG TTCTGTAGAC ACCGATTCG TGCCCAACA GCTGTATTTA TATAAGTCTG 1080
TTATTATTA TTAATTTATT GGGGTGACCT TCTTGGGGAC TCGGGGGCTG GTCTGATGGA 1140
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AAAA 1204

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Seq ID NO: C432 DNA Sequence
Nucleic Acid Accession #: NM_052858.1
Coding sequence: 54..1259

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1 11 21 31 41 51
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ATCCGTGGGG GCTGTGCGAG CCGCGGGGCT GGCAGAGAGA GCGGGAACCG GGAAGCGGCG 120
CCACCCAGAG CCAAGGCGCG ACCCAAGATC GACCTCGGGA CCGGACCCGG GACCCGCGCA 180
GGAAGCGAAG CAGCGACGCG AACCGGCGAA GGGAGCGGGA CCGGGAACCG AAGAGAGACC 240
AGGAGAGGGA CGGGAACCGC GACCGGAACC GGGAGCGGGA GAGGAGAGAG GAGAGGGAAA 300
GAGACCGGGA CCGAGGCCCC CGCGGGGACA CACACAGGGA CGCGGGCCCT CGCGCAGGTG 360
AACACGGAGT TTGGGAAAAA CCGCGCAAAA GCGGACGCGG GAGCGAGAGC CGGGGACTGA 420
CCTGGGACGC AGCCGCGCCT CTTGGGCCCC GCGCTTGGGA AGCCCGGAG CCGCGCAGC 480

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5	CGCAGAGGAA GGGAGACCCC GGGGCGCGCA GACCCGAAAG TGAACCCCTT TCGAGAGAGT 540
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	AGGAGCTCCT GGAATGCCAC AATATGCAAT ACTTGTGCAC TGGGAGAGCC TGCTGCCAAA 660
	TGCTGGAGGT TCTCTGAACT TTGCTGATCC TGGCCTGCAG CTCTGTGTCT TACAGTTCCA 720
	CAGGGGGCTA CACGGGCATC ACCAGCTTGG GGGGCATTIA CTACTATCAG TTCGAGGGGG 780
	CTTACAGTGG CTTTGTAGGT GCTGACGGGG AGAAGGCCCA GCAACTGGAT GTCCAGTTCT 840
	ACCAGCTAAA GCTGCCCATG GTCACCTGTG CAATGCGCTG TAGTGGAGCC CTCACAGCCC 900
	TCTGTGCTCT CTCTGTTGCC ATGGGTGTCC TGGCGGTCCC GTGGCATTTG CCCTGTGTGC 960
10	TGTTGACCGA AGGCTTGTGG GACATGCTCA TCGCGGGGGG GTACATCCCG GCCTGTGTCT 1020
	TCTACTTCCA CTACCTCTCT GCTGCCATG GCTCTCCTGT GTGTAAAGAG AGGCAGGCGC 1080
	TGTACCAAG CAAAGGCTAC AGCGGTTTGG GCTGCAGTTT CCAOAGGACA GATATAGGAG 1140
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	AGGGCTACCG AAAAGTTAGG AAGCTAAAAG AGAAGCCAGC AGAATGTITT GAATTTTAA 1260
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	GTGTGTGGG CCGAGCTCCC AGTCGATGG AGCGGTGTTT ATGGATGCAA CAGACCTGG 1440
	CTTCTGGAGT CCTCTGTGAG TGAGGGACCA ATCAAAATTA TTTTCTAAA AGCAAAAAA 1500
	TGGCGGGCCT GCGCGGCTCA CACCTGTAA CCGAGCACTT TGGGAGGCTT AGGTGGGTG 1560
20	ATCACTTGA GATCGGAGCT CGAGACCAAG TTGGCCAAAC TGGTGAAGCC CCGTCTCTAC 1620
	TAAATATCAA AAAAATTAGC CAGGCGTGGT GCGGGGCGCC TGTAAATCCA GCTACTTGGG 1680
	AGGCTGAGG AGGAAATCTG GTGATCTG GAGGCGGAG ATTGCAGTGA GCGAGATCC 1740
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Seq ID NO: C434 DNA Sequence
Nucleic Acid Accession #: Bos sequence
Coding sequence: 261..2861

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	AGCTACCACT	CGCGTTGCCG	ACGCCCGCGG	AGCTCGGGCT	GCCTGGGGT	CAGCGACCA	180
	ACGTCGCGGG	CCGCTGCGCT	CTCGGCCCGC	GAGGCGGTAC	ACGTGCTCGG	CTACAGACCC	240
35	AGAGGGAGCA	CGCTGCCAGG	ATGGGAGCTG	CTGGGAGGCA	GGACTTCCTC	TTCAGGGCCA	300
	TGCTGACCAT	CAGCTGGCTC	ACTCTGACCT	GCTTCCCTGG	GGCCACATCC	ACAGTGGCTG	360
	CTGGGTGCCC	TGACCAAGGC	CCTGAGTTGC	AACCTGGAAA	CCCTGGCCAT	GACCAAGACC	420
	ACCATGTGCA	TATGGCGCAG	GGCAAGACAC	TGCTGTCTAC	CTCTTCTGCC	ACGGTCTATT	480
	CCATCCACAT	CTCAGAGGGA	GGCAAGCTGG	TCATTAAAGA	CCACGACGAG	CGGATTGTTT	540
40	TGCGAAACCG	GCACATCCG	ATTGACAACG	GAGGAGAGCT	GCATGCTGGG	AGTGCCCTCT	600
	GCCCTTTCCA	GGGCAATTTT	CCGCAATCTT	TGTATGGAAG	GGCTGATGAA	GGTATTGAGC	660
	CGGATCCTTA	CTATGGTCTG	AAGTACATTG	GGGTTGGTAA	AGGAGGCGCT	CTTGAGTTGC	720
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	CAGAGGAGGG	CTATTTTCTT	GAAAGGAGCT	GGGGCCACCG	TGGAGTTATT	GTTCATGTCA	840
45	TGACCCCCAA	ATCAGGACA	GTCATCCATT	CTGACCGGTT	TGACACCTAT	AGATCCAAGA	900
	AAGAGAGTGA	ACGCTGTGTC	CAGTATTGGA	ACGCGGTGCC	CGATGGCAGG	ATCCTTTCTG	960
	TTGAGTGAA	TGATGAGGTT	TCTGAAATC	TGGATGACAT	GGCCAGGAAG	GCGATGACCA	1020
	AATTGGGAG	CAACACTCTC	CTGCACCTTG	GATTTAGACA	CCCTTGGAGT	TTTCTAAGT	1080
	TGAAAGGAAA	TCCATCATCT	TCAGTGGGAG	ACCATATTGA	ATATCATGGA	CATCGAGGCT	1140
50	CTGCTGCTGC	CGGGTATTTC	AAATTTGTTCC	AGACAGAGCA	TGGGGAATAT	TTCAATGTTT	1200
	CTTTGTCCAG	TGAATGGGTT	CAGACGCTGG	AGTGGAGGGA	GTGGTTCGAT	CATGATAAG	1260
	TATCTCAGAC	TAAAGGTGGG	GAGAAATTTT	CAGACCTCTG	GAAAGCTCAC	CCAGGAAAAA	1320
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	AGGTTGTCTA	CAAAAAAGGC	CAGGATTATA	GGTTTGCTTG	CTACGACCGG	GGCAGAGCCT	1440
55	GCOCGAGCTA	CCGTGTACCG	TTCTCTGTGG	GGAAGCCTGT	GAGGCCCAAA	CTCAGACTCA	1500
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	AGTACCCGAT	TCACCTCCAC	CTGGCCGGTG	ATGTAGACGA	AAGGGGAGGT	TATGACCTAC	1980
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65	GCTCCATGG	CTGTGTGATC	AAGGAGCTTG	TGGGCTATA	CTCTTTGGGC	CACGTCTTCT	2100
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70	GATTTTGTGT	TATTTTTCAC	CAGTACCAA	CGGGCCCTTC	CGTGGGAATG	TACTCCCCAG	2400
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	GGGCTGGCAT	GATCATAGAC	AACGGAGTCA	AAACCTCCA	GGCCTCTGCC	AAGGACAAAG	2520
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	AGCCCGGGGA	GCGGGCCATC	ATCAGACACT	TCATTGCCTA	CAGAAACAGG	GACCAAGGGG	2640
75	CCTGAGCTGC	CGGCGGGGAT	GTGTGGCTGG	ACAGCTGACA	TTTCAAGAGG	GAGGCTCAGG	2700
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AAAAAAA AA 4702

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Seq ID NO: C217 Protein Sequence
Protein Accession #: NP_005805.1

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1 11 21 31 41 51
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LMSDLEGNWK SRVRLVLVLP PSKPECCIEB ETIIQNNIQL TCQSKESGPT PQYSWKRYNI 180
LNQEQPLAQF ASGQPFVGLKN ISTDTSGYYI CTSSNEEGTQ FCNITVAVR SPMNVALYVG 240
IAVGVVALL IIGIIYCCC CRGKDDNTED KEDARENREA YEPPEQLRE LSREREREDD 300
YRQEQRSTG RESPDHLDQ 319

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Seq ID NO: C218 Protein Sequence
Protein Accession #: Bos sequence

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1 11 21 31 41 51
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LESSLSSESG BEPVEYKSLQ WFGATVRAHG SSILACAPLY SWRTEKEELS DPGVTCYLSL 180
DNEFRLLEYA PCRSDFSWAA GQGYCQGGFS AEFTKTGRVV LGGPGSYFWQ GQILSATQEQ 240
IABSYYPEYL INLVQGLQLT RQASSIYDDH YLGYSVAVGE FSGDDTDFV AGVFKGNLTY 300
GVYTLINGSD IRSLYNFSGE QMASYFGYAV AATDVNGDGL DDLLVGAPLL MDRTPDGRPQ 360
EVGRVYVYLQ HPAGIEPTPT LTLTGHDHFG RFGSSLTPLG DLDQDGYNDV AIGAPFGGET 420
QQGVVVFVFG PGFGLGSKPS QVLQPLWAAS HTEDFFGSAL RGRDLONGG YPDLVGSFG 480
VDKAVVYRGR PIVSASASLT IFFAMPWPEE RSCSLEGNEF ACINLSFCLN ASGKHVADSI 540
GFTVELQLDW QKQGGVRELA LFLASRQATL TQTLILONGA REDCREMKIV LRNESEFEDK 600
LSPRIALNF BLDPQAFVDS HGLRPAHYQ SKSRIEDKAQ ILLDCGEDNI CVPDLQLEVF 660
GEQNHVYLDG KNALNLTEHA QNVGEGGAYE AELRVTAPEE AEYSGLVKHP GNPSSLSCDY 720
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SQGVLELSCP QALBQQQLLY VTRVTGLNCT TNEPINFKGL ELDPGSLHHE QXKREAPSR 900
SASSGPQILK CPEASCPRLR CELGPLHQBE SQSLQLSEFRV NAKTFLQREH QPFLQCEAV 960
YKALKMPYRI LPRQLFQKER QVATAVQWTK AEGSYGVPLW IITLAILFGL ELGLGLIYIL 1020
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Seq ID NO: C219 Protein Sequence
Protein Accession #: NP_002412.1

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1 11 21 31 41 51
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YTPDLPRADV DHAIEKAFQL NSNVTPLTFT KVSQGQADIM ISFVRGDHED NSPFDGPGGN 180
LAHAFQPGPG IGGDAHFDED ERWTNNFREY NLHRVAANEL GHSGLSHST DIGALMYPSTY 240
TFSGDVQLAQ DDLDGICAIY GRSQNPVQPI GPQTPKACDS KLTFDAITTI EGEVMPFKDR 300
FYMRTNPFYP EVELNFISVF WPQLNGLA EYEFADREDEV RFFKGNKYWA VQGQNVLHGY 360
PKDYSSGEGF PRTVXKIDAA LSEENTGKTY FFWANKYWRV DEYKRSMDGF YPKMIAHDFP 420
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Seq ID NO: C220 Protein Sequence
Protein Accession #: Bos sequence

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1 11 21 31 41 51
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YTPDLPRADV DHAIEKAFQL NSNVTPLTFT KVSQGQADIM ISFVRGDHED NSPFDGPGGN 180
LAHAFQPGPG IGGDAHFDED ERWTNNFREY NLHRVAANEL GHSGLSHST DIGALMYPSTY 240

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TFSGDVQLAQ DDIDGIQAIY GRSONPVQPI GPQTPKACDS KLTFDAITTI RGEVMFFKDR 300
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 PKDIYSSGFG PRTVKHIDAA LSEENTGKTY FFWANKYWRV DEYKRSMDPG YPKMLAHDFP 420
 GIGHKVDVAF MDDGFFFEFH GTRQYKFDPK TKRILTLQKA NSWFNCRKN 469

Seq ID NO: C221 Protein Sequence
 Protein Accession #: NP_055146.1

1 11 21 31 41 51
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 LPAPVRVWVE LLIRPAPATA VIBLAFGRYI LPPFFIQCEI PELAIKLITA VGITVVMVLN 180
 SMSEVMSARI QIFLTFCKLT AILIIIVPGV MQLIKGQTON FKDAFSGRDS SITRLPLAFY 240
 YGMYAYAGWF YLNFVTSEVE NPEKTIPLAI CISMATTIGV YVLTNVAYFT TINAEHLLLS 300
 NAVAVTFSEI LGNFSLAIVP IFVALSCFGS MNGGVFAVSR LFYVASREGH LPEILSMIRV 360
 RKHTPLPAVI VLHPLTMIML FSGDLDSELN FLSPARWLF IGLAVAGLTYL RYKCPDMHRP 420
 FKVPFLPAL FSFTCLFMVA LSLYSDPFST GIGFVITLIG VPAYYDFIIV DKPRFRWFRIM 480
 SKKITRTLQI LLEVVPESDK L 501

Seq ID NO: C222 Protein Sequence
 Protein Accession #: NP_003237.1

1 11 21 31 41 51
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 SNKGAGTLDI SLTVQKQKQV VSVBEALLAT GQWKSITLTV QEDRAQLYID CEKMEKALD 180
 VPIQSVEFTR LASIARLRIA KGGVMDNEQG VLQNVRFVFG TTPEDILRNK GCSSTSVLL 240
 TLDNNVNGS SPAIRTNVIG EKTIDQLAIC GISCELSM VLELRGLRTI VTTLQDSIRK 300
 VTENKELAN ELRRPPLCYH NGVQYRNNEE WTVDSCTRCH CQNSVTICKK VSCPIMPEN 360
 ATPVDGECPP RCWPSDSADD GWSPSEWTS CSTSCQNGIQ QGRSCDSLN NACESSSVQT 420
 RTCHIQCECK RFKQDGGWSH WSPWSSCSVT CGDGVITRIR LCNSPSPQNN GKPCSGRARE 480
 TKACKKDACP INGGWSPWSE WDICSVTCGG GVQKSRSLCN NPAPQFGKD CVGDVTEHQI 540
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 AKCNYLGHYS DPMYRCECKE GYAGNGIICG EDTLDGWPEN ENLVCVANAT YHCKKDNCFN 720
 LPNSGQEDYD KDGIGDACCDD DDDNDKIPDD RDNCFPHYNP AQYDYDRDIDV GDRCDNCFYN 780
 HNPDQADTND NGEGDACAAD IDGGGILNER DNCQYVYNVD QRTDMDGVG DQCDNCPLEH 840
 NPDQLDSDD SDIGDTCDNMQ DDEDGHONN LDNCPYVFNQ NQADHDKDGK GDACDHDHNN 900
 DGIPDDKENC RLVPNDQKD SDGDGRGDAC KDDFDHDSVP DIDDICPENV DISETDPRFP 960
 QMIPLDFRGT SQNDFNWVVR HQGKELVQTV NCDPGLAVGY DEFNAVDPSG TFFINTERDD 1020
 DYAGFVFGYQ SSSRFVVMW KQVTQSYWDT NPTRAQGYSG LSVKVNSTT GPGEHLRNAL 1080
 WHTGNTPOQV RTLWHDPRHI GWKDFTAYRW RLSEHPKTEF IRVVMYEGKK IMADSGPTVD 1140
 KTYAGGRLGL FVFSQEMVFF SLLKYECRDP 1170

Seq ID NO: C223 Protein Sequence
 Protein Accession #: NP_002183.1

1 11 21 31 41 51
 MELLMLRQFL LASCWIIVRB SPTPGSEGBS AAPDCPSCAL AALPKDVPNS QPENVEAVKK 60
 HILNMLHLKK RPDVTQVPVK AALLMAIRKL HVGKVGNGY VEIEDDIGR ARMNELMEQT 120
 SEIITPAESG TARTKLEFEI SKEGSDLSVV BRAEVMFLK VPKANRTRK VTRIRFQQQK 180
 HPQSGLDTGE BAEVEVLKGE RSELLLSEKV VDARKSTWV FVSSSIQRL LDQSGKSLDV 240
 RIACQCGES GASLVLLGKK KKEEREGEK KGGGEGGAG ADEKEQSHR PFLMLQARQS 300
 EDHPRRRRR GLECDGKVIN CCKKQFFVSF KDIGWMDWII APSGYHANYC EGECPSHIAG 360
 TSGSLSFES TVINKYMRMG HSPFANKLSC CVPTKLRFMS MLYYDDGQNI IKKDIQNMIV 420
 EECGCS 426

Seq ID NO: C224 Protein Sequence
 Protein Accession #: NP_000086.1

1 11 21 31 41 51
 MVEDTACVLL LTLAALGASG GQGSPLGSDL GPQMLRELQS TNAALQDVRD WLRQQVREIT 60
 FLQNTVMBCD ACQMQQSVET GLPSVRELLH CAPGPCFPGV ACTQTSQGR CQPCPAQFTG 120
 NGSHCIDVNE CNARPCFPRV RCINTSPGFR CEACPPGYSG PTHQOVGLAF AKANKQVCTD 180
 INECFTGQHN CVFNSVCINT RGSFQCGPCQ PGFVGDQASG CQRGAQRFCP DGSFSCHEH 240
 ADCVLERDGS RSCVCRVWMA GNGILCGRDT DLDGFEDEKL RCPEFQCRKD NCVTVPMESQ 300
 EDVDRDGTGD ACDDPADGDG VNEKDNCPV VRNPDQRNTD EDKMGDACDN CRGKNDDQK 360
 DTDQDGRGDA CDDIDGDRI RNQADNCPRV FNSDQKDSG DGIGDADCNK FQKSNPDQAD 420
 VDHDVGDGAC DSDQDQDGDG HQDSRDNCPT VPNSAQEDSD HDGQGDACDD DDDNDGVFDS 480
 RDNCRIVFNP QGEDADRQDV GDVCGDDFDA DKVVDKIDVC PENAEVTLTD FRAEQTVLD 540
 PEGDAQIDPN WVVLNQGRIE VQTNWSDPGL AVGYTAFNGV DFEGTFHVNT VTDDDYAGFI 600
 FGVDSSSFY VVMKQMBQY YWQANPFRAV AEPGIQLKAV KSSGSGEGQL RNALWHTGDT 660
 ESQVRLNWD PRNVGWKDKK SYRWFLQHRP QVGYIRVRPY EGPELVADSN VVLDTTMRGG 720
 RLGVFCFSQS NIIMANLRYR CNDTIPEDYE THQLRQA 757

Seq ID NO: C225 Protein Sequence
 Protein Accession #: NP_612464

1 11 21 31 41 51

MRPQGPAAAP QRLRGLLLLL LLQLPAPSSA SEIPKKGOKA QLRQREVVDL YNGMCLOQGA 60
 GVPGRDGSFG ANGIPGTGTI FGRDGFKEGK GECLRESFEE SWTPNYKQCS WSSLNYGIDL 120
 GKLAECTPTK MRSNSALRVL FSGSLRLKCR NACCQRWYFT PNGABCSGPI PLEAITLYDQ 180
 GSPEMNSTIN IHTSSVBEGL CEGIGAGLVD VAIWVGTCSD YPKGDASTGW NSVSRIIEE 240
 LPK 243

Seq ID NO: C226 Protein Sequence
 Protein Accession #: NP_003216.1

1 11 21 31 41 51
 MATMENKVIC ALVLVSLMAL GTLAAQTET CTVAPRERQN CGFPGVTPSQ CANKGCCFDD 60
 TVRGVPMCFY PNTIDVPPEE ECZF 84

Seq ID NO: C227 Protein Sequence
 Protein Accession #: NP_056234.1

1 11 21 31 41 51
 MPKRAHWGAL SVVILLMGHE PRVALACPHD CACYVPSEVH CTFERSLASVP AGIARHVERI 60
 NLGFNSIQAL SETSFAGLTK LELLMIHGW IPSIEDGALR DLSSLQVYKF SYNKLKVITG 120
 QTLQGLSLNM RLHIDNKKIE FHPQAFNGL TSLRLHLLEG NLLHQLEPST FSTFTFLDYF 180
 RLSTIRHLYL AENMVRTLEA SMLRNMPLLE NLYLQGNPWT CDCEMRWFLE WDAKSRGILLK 240
 CKDKAYEGG QLCAMCFSPK KLYKHIEHKL KDMTCLKPSI ESELRQNRGR SIEEBQEQEE 300
 DGGSQLILEK FQLPQNSISL NMTDEHGMMV NLVCDIKKPM DVYKIHUNQT DEPDIDINAT 360
 VALDFECPET REMYKLMKLL IAYYSEVPVK LHRRLMSKD PRVSQYQRQD ADEEALYXTG 420
 VRAQILAEPE WVMQPSIDIQ LNRQSTAKK VLLSYTYQYS QTISTKOTRQ ARGRSWVMIE 480
 PSGAVQRDQT VLEGGQCQLS CNVKAESFPS IPWVLEPGSI LKAPMDDEDS KFSTLSSGWL 540
 RIKSMEPSDS GLYQCIAQVR DEMDRMVYRV LVQSPSTQPA EKDTVTIGKN PGESVTLPCN 600
 ALALFEAHLS WILENRIIN DLANTSHVYM LFNGLTSLPK VQVSDSGYYR CVAVNQQAD 660
 HFTVGTITVK KGSGLPSKRG KRPGAKALSR VREDIVEDEG GSGMGDEENT SRRLHHPKQD 720
 EVFLKTKDDA LNDGKKAKKG RRLKLIWKHS EKEPETNVAE GRVVFESRRR INMANKQINP 780
 ERNADILAKV RGNLPRKTE VPPLIKTTSP PSLSEVTPP FPAVSPPSAS PVQTVTSABE 840
 SSADVPLLGE EEHVLTGISG ASMGLEHNMN GVILVEPEVT STPLEEVDD LSEKTEZITS 900
 TEGDLKGTAA PTLISEPEPE SPTLHTLDTV YEKPTHEETA TEGWSAADVG SSEPTSSSEY 960
 BEPLDAVSLA BSEPMQYFDP DLETKSQDDE DKMKEDTFAH LTPTPTIWNV DSTSQLFED 1020
 STIGEPGVPG QSHLQGLTDM IHLVKSLSL QDTLLIKGM KEMSQTLQGG NMLBGDPHIS 1080
 RSSSEGGQBS KSTLTDOSTL GIMSSMSPVK KPAETTVGTL LDKDTTIVTT TFRQKVPASP 1140
 TMSTHPSRRR PNRGRRRLPM KFRHRHKQTP PTTAPSETP STQPTQAPDI KISSQVBSBL 1200
 VETAKVDNTV NTPKQLEMEK NAEPTSKGTP RRRHKGKPNK HRYTPSTVSS RASGSKSPSS 1260
 PENKERNIVT PSSETILLPR TVSLKTEGYP DSDLYMTTR KIVSSYKPKV ETLFVITYKT 1320
 SDGKEIKDDV ATNVDKHKED ILVTGESITN AIPTSRSLVS TMGEFKESB PVGFPGTPTW 1380
 NPSRTAQPCR LQTDIPVTTG GNLTDPPPLL KLEDDVDPTS EPLSSLTVST PFHQSEAGSS 1440
 TTLSSIKVEV ASSQAETTL DQDLETTVA ILLSETRPQN HTPTAAMKE PASSSTSTIL 1500
 MSLGQTTTK PALSPRISQ ASKDSKENVF LMYVGNPETE ATPVNNRGTO HMSGPNELST 1560
 PSSDRDAFNL STKLELEKQV FGSRSLPRGP DSQRQDGRVH ASHQLTRVPA KPILPTATVR 1620
 LPEMSTQASB RYFVTSQSPR HWTNKPETIT YPSGALPENK QFTTPRLSST TIPLEHMSK 1680
 PSIPSKFTDR RTDQFNQYSK VPGMNNIPEA RNPVKGPPSP RIPHYSNGRL PFFTNTKLSF 1740
 PQLGVTRRPQ IPTBPAPVPR ERKVIPGSYN RIHSHSTFHL DFGFPAFPLL HTFQTTGSPS 1800
 TNLQMFPMVS STQSSISFIT SSVQSSGSPF QSSSKFAGG FPASKFWSLG EKPQLITKSP 1860
 QTVSVTAEDT TVFPCEATGK PKPFVTWTKV SIGALMTPT RIORFEULKN GLVLRKQVQV 1920
 QDRGQIMCTA SNLGLDRMV VLLSVTVQQP QILASHYQDV TVYLGDTIAM ECLAKGTAP 1980
 QISWIPFDRR VQQTVPVSES RITLHENRNL SIKEASFSDR GVIKCVASNA AGADSLAIRL 2040
 HVALLEFVH QEKLEISLP PGLSIHICT AKAAPLPSYR NVLGDGTQIR PSQFLGNPL 2100
 VFENGTLVIE NLAPKDSGRY BCVAANLVGS ARRTVOLNVQ RAAANARITG TSPRRTDVRY 2160
 GTLLKDCBA SGDPNFRILW RLPSKRMDA LFSFDSRIKV FANGTLVKS VTKDAGDYL 2220
 CVAENKVGDD YVVLKVDVVM KPAKIEHKEE NDEKVFYGGD LKVDCAVAGL FNPFIENSLP 2280
 DGLVMSFMQ SDDSGGTRK YVVFNMGTLY FNEVGNRREG DYTCEAENQV GKDERMRVRV 2340
 VVTAPATIN KTYLAVQVFP GDVVTVACEA KGEPMKVTW LSPTNKVLP SSKYQIYQD 2400
 GTLLIQKAQR SDGSNYTCLV RNSAGEDERT VMIHVNQVPP KINGNPNPIT TVREIAAGGS 2460
 RKLIDCKAEG IPTPRVLWAF PGVVLPAFY YGNRITVHGN GSLDIRSLRK SDGVQLVCNA 2520
 RNBGGEARLI VQLTVLEPME KPIFHPFISE KITAMAGHTI SLNCSAAGTP TPLSVNVLPN 2580
 GTDLQSGQQL QRFYHKAADM LEISGLSSVD AGAYRCVARN AAGTERLVS LKVGKPEAN 2640
 KQXENLVSI NGETLKEPCT PFGAGQGRFS WTLEKGMHLE GPQTLGRVSL LKNGTLTVRE 2700
 ASVEDRGTYV CMETEVGSES VTSIPVIVIA YPERITSEPT PVIYTRPGNT VKLNCMAMGI 2760
 PKADITWELP DKSHLKAGVQ ARLYGNRPLH PQGSLTIQHA TQRDAGFYKC MAKNILGSDS 2820
 KTTYIHVF 2828

Seq ID NO: C228 Protein Sequence
 Protein Accession #: Ros sequence

1 11 21 31 41 51
 MPGKTLRTG APADYRVILK TSQDELDVDP DDISVRVMSS QSVLVSVDVP VLEKQKVVVA 60
 SRQYTVRYRE KGLARWYKQ QIANRRVLIE NLIPDTVYEF AVRISQGERD GKWSTSVFOR 120
 TPESAPTTAP ENLNVWFWNG KPTVVAASWD ALPETGKVK VCLLDTGLFS VSSFPQSAKS 180
 FQNTFFATPR LSHMLEQSPS PILETLLLPW WMVCSLGNAI FSKSGPQTGE ANDITPKPSL 240
 SLQCECSCT QKDFSLAYL IDIQTKQVNM DPQLEGSVFG PCFLFYFLTF MLDIGGFSFI 300
 MCYEDPPVSS LYNLSLKVA ASKADVQMT EDKPKPEKPS PSSPSRASA SSQPSVPA 360
 PQGNAKDLL LDLLKNILAN GGAPKPKQLR AKKAEELDLQ STRITGESEL GSREDSTMS 420
 SDTQDKRTL RPPSRGHSV VAPGRTAVRA KMPALFEREG VDKPGFSLAT QPRFGAPPSA 480
 SASPAHHAET QGTISRPSEF ASLNDNDLVD SDEDERAVGS LHPKGAFAQF RPALSPSRQS 540
 PSSVLRDSS VHPGAKPASP ARRTPHSGAA EEDSSASAPP SRLSPPHGGS SRLFTQFEL 600
 SSPLSKGKGD GEPAPATNSN APSTSTMSSS VSSHLSSRTQ VSEGAASADG BSHGCDRED 660

GGRQAEATAQ TLRARPASGH FHLRLHKPPA ANGRSPSRFS IGRGPRLOPS SSGQSTVPSR 720
 AHPRVPSHSD SHPKLSSGIH GDEDEKFLP ATVVDNRVPS SSRQPISRGW EDLERSPQSG 780
 ASLHRKEPI ENPKSTGADT HPQCKYSSLA SKAQDVQOST DADTEGHSPK AQPSTDRHA 840
 SPARPPAARS QHPSVPRRM TPGRAPEQQP PFPVATSQHH EGFQSRDAGR SPSPRLSLT 900
 QAGRPRFTSQ GRSHSSSDPY TASSRGMLFT ALQNDQEDAQ GSYDDSDTEV EAQDVRAAH 960
 AARAKEAAS LKHIQVESP TGACAGGDHR SQRGHAASPA RPSRPGGQS RARVPSRAAP 1020
 GKSEPPSKRP LSSKSSQSVS AEDEEEDAG FFKGGKEDLL SSSVPKWPSS STPRGGKDAD 1080
 GSLAKEEREP AIALAPRGS LAPVKRPLPP PPGSSPRASH VPSRPPPSA ATVSEVAGTH 1140
 PWRFTTRAP AGHFTTTPML SLRQMMHAR FRNPLSRQPA RPSYRQGYNG RPNVEGKVL 1200
 GSNKPKNGQR IINGPQGTGM VVDLDRGLVL NAEGRYLQDS HGNPLRIKLG GDGRITVDLE 1260
 GTFVVSFDGL PLFGQGRHGT PLANACDKPI LSLGGKPLVG LEVIKKTTHP PTTMQPTTT 1320
 TTPLPTTTT RPTATTMPR TTTTTPLETT TPRPTATT RPTTRPTTT VRTTRTTT 1380
 TTKPTTPTT TCPTTLETH DDDGNLIMSS NGIFECYAE DEFSGLETD AVTTEAYVI 1440
 YDEYEFETS RPTTTEPST TATTFVLE EGAISFPFE EFDLAGRKRP VAPYVTLNK 1500
 DPSAPCSLTD ALDHQVDSL DEIIPNDLKK SDLPQAHAPR NITVAVEGC HSFVIVDWDK 1560
 ITPGLVITGY LVYSASYEDF IRNKFSTQAS SVTLPIENL KENTRYTFV QAQNFHGYGP 1620
 ISPSVSFVTE SDNPLLVPR PGGELSGSHS LSNMIPATRT AMDGNM 1666

Seq ID NO: C229 Protein Sequence
 Protein Accession #: NP_003005.1

1 11 21 31 41 51
 MFLSILVALC LNLHLALGVR GAPCEAVRIP MCRHMPNNIT RMPNHLEHST QENAILAISQ 60
 YSELVDVNC S AVLRFFFCAM YAPICTLEEL HDPKPKCKSV CQRARDCEP LMKMYNHSWP 120
 ESLACDELTV YDRGVCISPE AIVTDLPEDV KWIDITPDMM VQERPLDVC KRLSPDRCKC 180
 KWKPTLATY LSKNYSYVH AKIKAVQSG CNEVTVVDV KRIKSSSP1 PRTQVPLTN 240
 SSCQCPHILP EQDVLIMCYE WSRMMLLEN CLVEKNRDL SKRSIQWEER LQEQRRTVQD 300
 KKTAGRTSR ENPFKPKGK PAKKASPKK NIKTRSAQKR TNPXKV 346

Seq ID NO: C230 Protein Sequence
 Protein Accession #: NP_005931.1

1 11 21 31 41 51
 MAPAANLRS AARALIFPML LLLQFPPLL ARLPFDVHH LHAERKGPQ WHAALPSSPA 60
 PAPATQEAR PASSLRPPRC GVPDPSDGLS ARNRQKHFVL SGRWREKTL TYRILRFPWQ 120
 LVQEQVRQTM AEALKVMSDV TPLTFTEVHE GRADIMIDFA RYWHGDDLPF DPGGILAH 180
 FFPKTHREGD VHPDYDETNT IGDDQGTDL QVAHEKFGHV LGLQHTTAAL ALMSAFYTR 240
 YPLSLSPDDC RGQVHLVYGP WPTVTSRTPA LGPQAGIDTN EIALEEDAP PDACEASFDA 300
 VSTRIGELFF PKAGFVWRLL GGQLQPGYFA LASRHWQGLP SPVDAAFEDA QGHINEFQGA 360
 QYVYDGEKQ VLGPAPLTEL GLVRFVHAA LVWGEKKNKI YFFRGRDYWR FHPSTRVDS 420
 PVPKATDWR GVPSEIDAAF QDADGYAYFL RGRLYWKEDP VKVKALRGFP RLVGPDFFGC 480
 AEPANTPL 488

Seq ID NO: C231 Protein Sequence
 Protein Accession #: NP_076927

1 11 21 31 41 51
 MGENDPFAVE APFSFSLFSG LDDLKISPA PDADAVAAQI LSLPLKFPF IIVIGIALI 60
 LALALGLGIE FDCSGKYRRC SFEKICIELIA RCDGVSDCKD GEDEYRCVRV GQNAVILQV 120
 TAAWKTMC S DDWKGHYANV ACAQLGFPSY VSSDNLVSS LEGQFREBFV SINHLPLDK 180
 VTALHHSYV REGCAGSEVV TLQCTACGHR RGYSSRIVGG NMSLLSQWFW QASLQFQGH 240
 LCGGSVITPL HIITAACHV DLYLPKSWTI QVGLVSLDN PAPSHLVEKI VHSKYKPKR 300
 LGMDLALMKL AGPLTFNEMI QPVCLNSEK NFFDGKVCWT SGWGATKDG DASPVLNBA 360
 VPLISNKKCN HRDVYGGIIS PMLCAGYLT GGVNSCQGDG GGPLVCQERR LMKLVGATSF 420
 GIGCAEVNKP GVYTRVTSPL DWIHEQMERD LKT 453

Seq ID NO: C232 Protein Sequence
 Protein Accession #: NP_003211

1 11 21 31 41 51
 MLWKLTDNIK YEDCEDRHG TSNGTARLPQ LGTVGQSPYT SAPPLEHTPN ADFQPFYFP 60
 FYQFIYFQSQ DPFYSEVNDPY SLNPLHAQPP PQHPGNPQGR SQSESOLHHT HRGLPHQLSG 120
 LDPRRDYRRH EDLLHGPAL SGLGLSLIE SLPHATIEVP HVEDPGINIP DQTVIKKGPV 180
 SLKSNSTNAV SAIPINKDNL FGGVNNENEV FCSVPGRSL LSSSTSKYVT VAEVQRLSP 240
 PECLNASLLG GVLHRAKSN GGRSLREKLD KIGLNLPAGR RKAANVTLLT SLVEGEAVEL 300
 ARDFGYVCT EPPAKAVAEF LNRQHSDENE QVTEKNMLLA TKQICKETD LLAQDRSFLG 360
 NSRFPNILEP GIQSLTFEN LIEHGFSGPA VCAAVTALQ XLTEALKAMD KMYLSNNPNS 420
 HTDNNAKSSD KREKHX 437

Seq ID NO: C233 Protein Sequence
 Protein Accession #: NP_002979.1

1 11 21 31 41 51
 MKGLAAALEV LVCTMALCSC AQVGTNKELC CLVYTSWQIP QKFIVDYSET SPQCPKPGVI 60
 LLTKRGRQIC ADPNKKVQX YISDLKLA 89

Seq ID NO: C234 Protein Sequence
 Protein Accession #: NP_004054.1

	1	11	21	31	41	51	
	MILQARLHSL	CLMLYLATG	YGQEGKFSGP	LKPMTFSTYE	GOEFSQIIFQ	EKANEPAAVTF	60
5	ELTGETDNIF	VIERGOLLYY	NRALDRSTRS	THNLQVAALD	ANGIIVEGPPV	PITIEVKDIN	120
	DNRPFTLQSK	YEGSVQRNSR	PKRPFLYVNA	TDLDDPATPN	GQLYYQIVIQ	LPMINNVMYF	180
	QINNKTGAIS	LTREGSQELN	PAKNPSYNLV	ISVKDMGGQS	ENSFSDTTGV	DIIVTENIWK	240
	APKPEVMVEN	STDPHPKIT	QVRWMDPGAQ	YSLNDKEKLP	RFPFSIDQEG	DIYVTQPLDR	300
	EEKDAVVFYA	VAKDEYGRPL	SYPLEIHVKV	KDINDNPTFC	DSFVTVPFVQ	ENERLGNSIG	360
10	TLTAHDRDEE	NTANSFLNVR	IVEQTPKLP	DGLPLIQTYA	GMLQLAKQEL	KKQDTPQYNL	420
	TIENVSDRDK	TLCFQVINVI	DINDQIPIFE	KSDYGNLTLA	EDTNIGSTIL	TIQATDADEP	480
	FTGSSKILYH	IIKGDSEGLR	GVDTPHNTNT	GVVLIKKPLD	PETAAVSNIV	FKAENPEPLV	540
	FGVKYNASSF	AKFTLIVTDV	NEAPQFSQHV	FOAKVSEDVA	IGTKVGNVTA	KDPEGLDISY	600
	SLRGDTRGWL	KIDHVTGEIF	SVAPLDREAG	SPYRVQVAT	EVGSSLSISV	SEFHLILMDV	660
15	NDNPPRIAKD	YTGLFFCHFL	SAPGSLIFEA	TDDQHLFRG	PHFTPELGGG	SLQNDMEVSK	720
	INGTHARLST	RHTEPEEREY	VVLIRINDGG	RPPLLEGIVSL	PVTFCSCVEG	SCFRPAGHQT	780
	GIPTVGMAVG	ILLTLLLVIG	IILAVVFIRI	KKQKGDNDVE	SAQASEVKFL	RS	832

Seq ID NO: C235 Protein Sequence

Protein Accession #: NP_004434.1

	1	11	21	31	41	51	
	MARARPPPPP	SPPPGLPLPL	PLILLPLLLL	LPAGCRALRE	TLMDTKWVTS	ELAWTSHPES	60
25	GWEEVSGYDE	AMNPIRTYQV	CNVRESSQNN	WLRTGFIWRR	DVQRVYVELK	PTVRDCNSIP	120
	NIPGSCKEFP	NLFYIYADSD	VASASSPFWM	ENPYVKVDTI	APDESFSRLD	AGRVNTKVR	180
	PGPLSKAGFY	LAFQDQGACM	SLISVRAFVK	KCASTTAGFA	LFPETITQAE	PTSLVIAFGT	240
	CIFNAVEVSV	PLQLYQNGDG	ENNVFVGACT	CATGHEPAAK	ESQCRPCPPG	SYKAKQGECP	300
	CLPCPFNSRT	TSPAASICTC	HNNFYRADSD	SADSACTIVP	SPFRGVISMV	NETSLILEMS	360
30	EPRDLGGRDD	LLYNVICKKC	KGAGGASACS	RCDNVEFVFP	RQLGLTERRV	HISHILAHTR	420
	YTFEVQAVNG	VSGKSLPLPR	YAAVNITINQ	AAPSEVPTLR	LHSSSGSSLT	LSWAPPERP	480
	GVILDYEMNG	FEKSEGLAST	VTSQMNVSQV	DGLRFDARYV	VQVARTVAG	YQYSRPAEF	540
	ETTSEKSGGA	QQLQEQLELI	VGSATAGLVF	VYAVVVIAIV	CLRKQREHSG	SEYTEKLQQY	600
	IAPGNKVYID	PFTYEDNEA	VREFAKEIDV	SCVKIEEVIG	AGEFGEVCRG	RLKQGRREV	660
35	FVAIKTLKVG	YTERQRDRFL	SEASIMQQPD	HPNIRLEGV	VTCSRPMIL	TEFMENCALD	720
	SFLRLNDQGF	TVIQLVGMRL	GIAAGMKYLS	EMNYVHRDLA	ARNILVNSNL	VCKVSDFGLS	780
	RFLDDPSDF	TYTSSSLGKI	PIRWTAPPAI	AYRKFTSASD	VWSYGVIMME	VMSYGERPYW	840
	DMNQDVINA	VEDQYRLPPP	MDCTALHQL	MILDCWVRDN	LRPKFSQIVN	TLDKILRNAA	900
	SLKVLSAQGS	GMSQFLDRT	VPDYTTFTTV	GDWLDALIKG	RYKESFVSAG	FASFDLVAQM	960
40	TAEDLLRIGV	TLAGHQKKIL	SSIQDMRLQM	NQTLFVQVQ			998

Seq ID NO: C236 Protein Sequence

Protein Accession #: NP_001795.1

	1	11	21	31	41	51	
	MYVGVVLKDD	SPVYFGPARP	ASLGLGPANY	GPPAPPPAPP	QYEDFSSYSH	VEPAPAPPTA	60
	WGAPFPAPKD	DWAAYAGGCP	AAPAAFPASL	AFGPPPDFSP	VPAPPGFGPG	LLAQPLGGPG	120
	TPSSPGARFP	TEYEWMLREY	AAGGGGSGSK	TRTKDKYRVV	YTDEQRLELE	KEFHYSRYIT	180
50	IRKKEELAA	LGLTERQVKI	WPNRRAXER	KVNKKKQQQQ	QPPQPPMAHD	ITATPAGPSL	240
	GGLCFSTNTSL	LATSSPMFVK	EEFLP				265

Seq ID NO: C237 Protein Sequence

Protein Accession #: NP_068813.1

	1	11	21	31	41	51	
	MGSDBARKGG	GGPKDFGAGL	KYNSRHEKVN	GLEEGVEFLP	VNNVKKVEKH	GPGRWVVLAA	60
	VILGILLVLL	GIGFLVWHLQ	YRDVVRVQKV	NGVMRITNEN	FVDAYENSNS	TEFVSLASKV	120
60	KDALLLLYSG	VFFLGPYHKE	SAVTAFSSEGS	VIAYYNSKPS	IPQHLVEEAE	RVMAEEVVUM	180
	LPFRARSLKS	FVVTSSVVAFP	TDGKTIVQRTQ	DNSSCSFLHA	RGVELMRFTT	PGFPDSPYPA	240
	HARCAWALRG	DADSVLSLTF	RSFDLASCE	RGSDLVTIVN	TLSPMEPEAL	VQLCGTYPPS	300
	YNLTFHSSQN	VLLITLITNT	ERRHPGFEEAT	FFQLPRMSSC	GGRLKKAQGT	FNSPYTFGHY	360
	PNIDICTWNI	EVPNNQHVKV	RPKFFVLELP	GVPAGTCPKD	YVEINGEKYC	GERSQFVVTG	420
65	NSNKITVRPH	SDQSYTDGTF	LAEXLSYDSS	DPCPGQFTCR	TGRCIRKELR	CDGWADCTDE	480
	SDELNCSCDA	GHQFTCKNKF	CKPLFWVCDG	VNDGGSNDE	QGCSCPAQTF	RCSNGKCLSK	540
	SQQCNGKDDC	GDGSDAECBP	KVNVTCTKH	TYRCLMGLCL	SKGNPECDGK	EDCSGDSDEK	600
	DCDCGLRSFT	RQARVVGTD	ADGGEWPNQV	SLHALGQCHI	CGASLISEPW	LVSAAHCYID	660
	DRGFYSOFT	QWTAFLGLHD	QSQRSAFGVQ	ERRLKRIISH	PEFNDFTFDY	DIALLELEKEP	720
70	AEYSSNVRPI	CLPDASVFP	AGKAIWVTOM	GHTQYGGTGA	LILQKSSIRV	INQTTCCENLL	780
	PQQITPRMMC	VGFLSGGVDS	CQGDGSGGFLS	SVEADGRIFQ	AGVVSWDGDC	AQRNKGVTYT	840
	RLPLFRDWIK	ENTGV					855

Seq ID NO: C238 Protein Sequence

Protein Accession #: Eos sequence

	1	11	21	31	41	51	
	MPPFLLEAV	CVFLFSRVPP	SLPLQEVHVS	KETIGKISAA	SMNMNCSAAV	DIMFLLDGSN	60
	SVGKGSEFRS	KHEFAITVCDG	LDISPERVRV	GAQFQSSSTP	LEFPLDSFST	QQEVKARIKR	120
80	MVFKGGRTET	ELALKYLLHR	GLPGGRNASV	PQILLIIVTDG	KSQGDVALPS	KQLKRGVTV	180
	FVGVRFPRFN	ESLHALASEP	RQGVLLABQ	VEDATNGLF8	TLSSSAICSS	ATPDCREVAH	240
	PCEHTYLEMV	REBAGNAPCN	RGSRTLAVL	AAHCPFFSWK	RVFLTHPATC	YRTTCPCPCD	300
	SQPCQNGGTC	VEPGLDGYCQ	LCPLAFGGEA	NCLAKLSLEC	RVDLLFLADS	SAGITLDDGFL	360

5 RAKVFKRFV RAVLSEDSRA RVGVATYSRE LLVAVPVGEY QDVPDLVWSL DGIPFRGGPT 420
 LTGSALRQAA ERGFGSATRT QDRPRRVVV LLTESHSEDE VAGPARHARA RELLLLGVGS 480
 EAVRAELEEI TGSPKHVMVY SDFQDLFNQI PELQGLKCSR QRPQCRTQAL DLVFMLDISA 540
 SVGPENFAQM QSFVRSCALQ FEVNPDTVQV GLVVGYSQVQ TAPGLDTKPT RAAMLRAISQ 600
 APYLGGVGS A GTALLHIYDK VMTVQRGARP GVPKAVVLT GGRGAEDAAV PAQKLKRNNGI 660
 SVLVVGVGVP LSEGLRRLAG PRDSLHVAA YADLRYHQDV LIEWLCGEAK RPNVLCCKPSP 720
 CMNEGSCVLQ NGSYRCKCRD GWEGPHCENR FLRRP 755

Seq ID NO: C239 Protein Sequence
 Protein Accession #: Bos sequence

10 1 11 21 31 41 51
 15 MPFFLLLEAV CVFLFSRVFP SLPLQEVVVS KETIGKISAA SKMMWC8AAV DIMFLDGSN 60
 SVGKGSFERS KHAFTVCDG LDISPERVRV GAFQFSSTPH LEFFLDSEST QQEVKARIKE 120
 MVFKGRTET ELALIKYLLHR GLPGGRNASV PQILIIITDG KSQGDVALPS KQLKRGVTU 180
 FAVGVRRPFR EELHALASEP RGQHVLLAEQ VEDATNGLFS TLSSSAICSS ATPDCRVEAH 240
 PCERHTELV REFAGNAPCW RGSRTLAVL AAHCFFYSNK RVFLTEPATC YRTTCGPDCD 300
 20 SQPCQNGGTC VPEGLDGYQC LCPLAFGSEA NCALKLSLEC RVDLLFLDLS SAGTTLDGFL 360
 RAKVFKRFV RAVLSEDSRA RVGVATYSRE LLVAVPVGEY QDVPDLVWSL DGIPFRGGPT 420
 LTGSALRQAA ERGFGSATRT QDRPRRVVV LLTESHSEDE VAGPARHARA RELLLLGVGS 480
 EAVRAELEEI TGSPKHVMVY SDFQDLFNQI FELQGLKCSR QRPQCRTQAL DLVFMLDISA 540
 SVGPENFAQM QSFVRSCALQ FEVNPDTVQV GLVVGYSQVQ TAPGLDTKPT RAAMLRAISQ 600
 25 APYLGGVGS A GTALLHIYDK VMTVQRGARP GVPKAVVLT GGRGAEDAAV PAQKLKRNNGI 660
 SVLVVGVGVP LSEGLRRLAG PRDSLHVAA YADLRYHQDV LIEWLCGEAK RPNVLCCKPSP 720
 CMNEGSCVLQ NGSYRCKCRD GWEGPHCENR EWSBSCVSVS QGWILETFLR HMAFVQ8SS 780
 RTPSPNTRRG LGTEMVPTFW NVCAQFP 807

Seq ID NO: C240 Protein Sequence
 Protein Accession #: XP_097386.1

30 1 11 21 31 41 51
 35 MPKSEPLGCL SPASRAPGSA AATGANLPAA SGGPGPLGPP CTCPPESLGR GRAGSRAGSS 60
 PSQCVCVSGI LRVVSVDDPA SRRWVDLDSM SEDLSLLLT MIVGTGGVGG GWARGWVPAQ 120
 RKEVAGSGH AGRGNGRRLQ RVYGARSWIL GRKPCLORL PASGGFVQPO PCPSFATACR 180
 WGFPGVAFW GAAQHFFLCR LGGGRVPSA TRTLDGF 217

Seq ID NO: C241 Protein Sequence
 Protein Accession #: CAC03433

40 1 11 21 31 41 51
 45 MLSSTDTFTA SWELVVRVDH PNEBQKQDVT LRVSGDLHVQ GVMLKLVEQI NISQDWSDEA 60
 LWWEQKHCMW LKTHWTLDDY GVOADAKLLF TPOHMLRLR LFNLMVRLR VSFSAVVFA 120
 VSDICKILNI RRESELSLLK PSQDYFKKK KKKMKNEPI IEDILNLESS PTASGSSVSP 180
 GLYSKTMPTI YDPINGTPAS STMTWFSDSF LITEQCSILA PSQPPQSPEA LADMYQPRSL 240
 VDKAKLNGW LSSRSRLMEQ GQDEDEQLLL RFKYYSFFDL NPKYDAVRIN QLYEQARWAI 300
 50 LLEEIDCTER EMLIFAALOY HISKLSLSAR TQDFAGESEV DEIBAALSNL SVTLEGGKAD 360
 SLLEIDITIP KLADNLKLFK PKLLPKAFK QYWFIFKDT S IAYFENKELE QGEPLKLN 420
 RGCEVVPDVN VAGRKFGIKL LIPVADGME MYLRCTHENQ YAQWMAACML ASKGLTMADS 480
 SYQPEVLNLL SFLEMKNRNS ASQVASSLEN MDMNPECFVS PRCAKHKSK QLAARILEAH 540
 QMVAQMLPVE AKLRFQIQAQ SLPEFGITY LVRFKGSKKD DILGVSYNRL LKIDAATGIP 600
 55 VTIWRFNLK QMNVNWTRO VVIEFDQNVF TAPTCLSADC KIVREYIGY IFLSTRSKDQ 660
 NETLDEDLFH KLTTGGQD 677

Seq ID NO: C242 DNA Sequence
 Nucleic Acid Accession #: NM_005170
 Coding sequence: 337..918

60 1 11 21 31 41 51
 65 GGGCGTGAGA AAGCGACGG CGGCGGCGCG GAGGAGGGTT ATCTATACAT TTAAAAACCA 60
 GCGCGCTGGG CCGCGCTGCG GGAGACCTGG GAGAGTCCGG CCGCACGCGC GGGACACGAG 120
 CPTCCACGCG TCCTTGCGCG GTACGGCTG CCACCACTAG GCCTCTATC CCGGGGCTCC 180
 AGACGACCTA GAGCGCGTGC CCTGGGAGT TGCTGCGCG CGCGGTCCA GAAGCCCCCT 240
 TGGGCGCGCA CAGTTTTCCT CGTCGCTGCC GGTTCCTCTG CTGACACCTT CTGCGGCGC 300
 GCGCGGACCT GAGCGGGCGG GGTGGATGCA GCGCGGATGG ACGGCGGAC ACTGCCGAG 360
 70 TCGCGGCCCT CTGCGGCCCT CGTCCCTGTC GGTGCGCTG CCGCGCGGAG ACCCGGCTCC 420
 CCGGAACCTG TCGCTGCGG CCGCGGCGG CGACCGGCA CCGCAGAGC GGGAGGCGGC 480
 GCAGCGGCCG TAGCGCGCGG CAATGAGCGC GAGCGCAACC GCGTGAAGCT GGTGAACCTG 540
 GGCTTCACAG CGCTCGCGCA GCACGTGCGC CAGCGGCGCG CCAGCAGAG GCTGAGCAAG 600
 GTGAGACGCT TCGCTCAGC CGTGGAGTAC ATCCGCGCGC TGCAGCGCT GCTGGCGAG 660
 75 CAGCAGCGCG TCGCAGAGC GCTGGCGGGA GGGCTGAGGC CGCAGGCGGT GCGGCGGTCT 720
 GCGCGCGCGG GCGCGCGGAG GACCAACCGG GTGCGCGCT CGCCTTCCG CGCTCTCTG 780
 TCCCGCGGCC GCGGCGGCGG CTGCGAGGCC GGTCTCCCGC GTTCCGCTA CTGCTCGGAC 840
 GACAGCGGCT GCGAGGCGCG GCTGAGTCT GCGGAGCGCG AGCTACTCGA CTCTCCAGC 900
 80 TGGTAGGGG GCTACTGAGC GCCCTCGACC TA 932

Seq ID NO: C243 Protein Sequence
 Protein Accession #: NP_060233.1

1 11 21 31 41 51

	MSGHQLQLA	ALNPWLLMAT	LQAGFGRTGL	VLAADVESER	SAEQKAVIRV	IPLKMDPTGK	60
	LNLTLLEGVFA	GVAETTPAEG	KLMQSHPLYL	CNADDDNLE	PGFISTVKLE	SPRRAPRPCI	120
5	SLASKARMAG	ERGASAVLED	ITEDRAAAEQ	LQQPLGLTWP	VVLIWGNDAE	KLMEFVYKNG	180
	KAHVRIELKE	PPAWDYDVW	ILMTVVGTFI	VIIILASVLRI	RCRPRHSRED	PLQORTAWAI	240
	SQLATRRYQA	SCRQARGSWP	DSSSCSSAP	VCAICLEEF	EGQELRVISC	LHEPFRNCVD	300
	PWLHQHRTCF	LCVFNITEGD	SFSQSLGFSR	SYQEPGRRLH	LIRQHPGHAH	YHLPAAYLLG	360
	PSRSVAVARPP	RPGPFLPQSE	PGMGPRHERF	PRAAHPRAPG	EQRLAGAQH	PYAQGWGMSH	420
10	LQSTSQHFAA	CPVPLRRARP	PDSSGSGESY	CTERSGYLAD	GFASDSSSGP	CHGSSSDSVV	480
	NCTDISLQGV	HGSSSTFCSS	LSSDFDPLVY	CSPKGDPOKV	DMQFVTSRP	RSLSDSVPTG	540
	ETQVSSSHVY	HRHRHHHYK	RFQWHGRKPG	PETQVPSQRP	PIRTPQPRP	PSPDQQVTVG	600
	SNSAAPSRLP	SNPQCPRALP	BPAPGPVDAS	SICPSTSSLF	NLQKSSLSAR	HPQRKRGGP	660
	SEPTPGSRPQ	DATVHPACQI	FFHYTPSVAY	PWSPEAEPLI	CGPFGLDKRL	LPETPGPCYS	720
15	NSQFVNLCLT	PRQPLEPHPP	GGPSEWSSD	TAEGRPCYP	HCQVLSAQPG	SEEELEELCE	780
	QAV						783

Seq ID NO: C244 DNA Sequence
Nucleic Acid Accession #: NM_004289
Coding sequence: 493...1695

	1	11	21	31	41	51	
	GCGCGCCCT	CGTCCACCG	AGGAGCCGGC	GCCAGCGTGG	ACGCGCGCAG	CCAGGCTGTG	60
	CAGGGGGGCG	GCGGGGACCC	CGAGCGGCT	CGGAGTGGCC	CCTTGGACGC	CGGGGAAGAG	120
25	GAGAGGCGAC	CCCGGGAACC	GACGGCTCAG	GTGCCGGACG	CTGGCGGATG	TGCGAGCGAG	180
	GAGATGGGG	TACTAAGAGA	AAAGCACGAA	GCTGTGGATC	ATAGTTCCCA	GCATGAGGAA	240
	AATGAAGAAA	GGGTGTACAG	CCAGAAGGAG	AATTCACCTC	AGCAGAATGA	TCATGATGAA	300
	AACAAATAG	CAGAGAAACC	TGACTGGGAG	GCAGAAAGA	CCACTGAATC	TAGAAATGAG	360
	AGACATCTGA	ATGGGACAGA	TACTTCTTTC	TCTCTGGAGG	ACTTATTCCT	GTTCCTTTCA	420
30	TCACAGCCTG	AAATTCACCT	GGAGGCGATC	TCATTGGGAG	ATATTCTCTC	TCCAGGCAGT	480
	ATCAGTGATG	GCATGAATTC	TTCAGCACAT	TATCATGTAA	ACTTCAGCCA	GGCTATAAGT	540
	CAGGATGTGA	ATCTTCATGA	GGCCATCTTG	CTTTGTCCCA	ACAATACATT	TAGAAGAGAT	600
	CCAAACAGCA	GGACTTCACA	GTCAACAAG	CCATTTCCTG	AGTTAAATTC	TCATACCACC	660
35	AATCTGAGC	AAACCCCTCC	TGGAACTAAT	TTGACAGGAT	TTCTTTCAAC	GGTTGACAA	720
	CATATGAGGA	ATCTAACAG	CCAAGACCTA	CTGTATGACC	TGACATAAA	TATATTTGAT	780
	GAGATAAAT	TAATGTCAAT	GGCCACAGAA	GACAACTTTC	ATCCAATCGA	TGTTTCTCAG	840
	CTTTTGTATG	AACCAATTC	TGATTCTGGC	CTTTCTTTAG	ATTCAAGTCA	CAATAATACC	900
40	TCTGTTCATC	AGTCTAATTC	CTCTCACTCT	GTGTGTGATG	AAGTGTCTAT	AGGTTATTGC	960
	ACTGACCATG	AACTCTAGTC	CCATCATGAC	TGAGAGGTTG	CTGTAGGTGG	CTACTACCCA	1020
	GAACCCAGTA	AGCTTTGTCA	CTTGGATCAA	AGTGATTCTG	ATTTCCATGG	AGATCTTACA	1080
	TTTCAACACG	TATTTCAATA	CCACACTTAC	CACCTACAGC	CAACTGCACC	AGATCTTACT	1140
	TCTGAACCTT	TTCCGTGGCC	TGGGAAGTCA	CAGAAGATAA	GGAGTAGATA	CCTTGAAGAC	1200
	ACAGATAGAA	ACTTGAAGCG	TGATGAACAG	CGTGCTAAAG	CTTTGCATAT	CCCTTTTCTT	1260
45	GTAGATGAA	TTGTGGCGAT	GCTGTGTGAT	TCTTTCAATA	GCATGTTAAG	TAGATATTAT	1320
	CTGACAGACC	TACAACTCTC	ACTTATCCGT	GACATCAGAC	GAAGAGGGAA	AAATAAGGT	1380
	GCTGCGCAGA	ACTGTCTGTA	ACGCAATTC	GACATAATTT	TGAATTTAGA	AGATGATGTA	1440
	TGTAACTTGC	AAGCAAGAAA	GGAACTCTTT	AAGAGAGAGC	AAGCACATAT	TAAACAAGCT	1500
	ATTAACTATA	TGAACAGAAA	ACTGCATGAC	CTTTATCATG	ATATTTTATG	TAGATTAAAG	1560
50	GATGACCAAG	GAATCCCACT	CAATCCCACT	CACTATGCTC	TCCAGTGTAC	CCATGATGGA	1620
	AGTATCTTGA	TAGTACCCAA	AGAACTGGTG	GCCCTAGGCC	ACAAAAGGA	AACTCAAAAG	1680
	GGAAGAGAAA	AGTGAGAGAA	AACCTGAAGT	GGACTCTATT	ATGTGAAGTA	GTAATGTTCA	1740
	GAAACTGATT	ATTGGATGCA	GAAACCATTC	AAACTGCTTC	AAGAATTGTA	TCTTTAGTGA	1800
	CTGTCTACTG	AATTAACCTG	TAAACGCTGT	TTTGAAGCTT	ACATGGACAA	ATGTTTAGGA	1860
55	CTTCAAGATT	ACACTCTGGG	GCAATCTGGG	GGAGCCACAA	CTTTTCATGA	AGTGCAATGT	1920
	ATACAAATTT	CATAGTTATG	TCCAAGAAAT	AGGTTAAATC	GAAACCCAG	TAAAGCTTTC	1980
	CATCTTGGCA	GCCATCTCTT	TAAAGAGTAA	GTGTGTTACT	TCAAAAAGAG	CAAAACTGG	2040
	GGATCAAAAT	ATTTTAAGAG	GTATTTCACT	TTTAAATGCA	AAATAGCCTT	ATTTTCAATT	2100
	AGTTTGTATG	CATATATGTC	AGCTTTTCAA	ACACTATTTT	AATCTTTATA	TTTAACTTAT	2160
60	AAATTTTGTCT	TTCT					2174

Seq ID NO: C245 Protein Sequence
Protein Accession #: NP_004433

	1	11	21	31	41	51	
65	MALRRLLGAAL	LLLPLLAAVE	ETLMDSTTAT	AELGMMVHPP	SGWEEVSGYD	EMMNTIRTQ	60
	VGNVFESSQN	NWLRTKFIIR	RGARHRIHVM	KFSVRDCSSI	PSVPSGCKET	PNLYYYEADF	120
	DSATKTFPFW	MENPVVKVD	TAADSPSQV	DLGGVVKIN	TEVRSFGPVS	RSGFYLAQD	180
70	YGGCMELIAY	RVFYRKCPRI	IQNGAIFQET	LSGAESTSLV	AARGSCIANA	BEVDVPIKLY	240
	CNGDGEMLVF	IGRCMCKAGF	BAVENGTVC	GCPSGTFKAN	QGDSEACTEC	INSRTTSEGA	300
	TNCVCNMGY	RADLDPLDMF	CTTIPSAFQA	VISSVNETSL	MLEWTFPRDS	GGREDLVYNI	360
	ICKSCSSGSG	ACTRCGDRVQ	YAFBQLGLTE	PRIYISDLIA	HTQYTFEIQ	VNGVIDQSPF	420
	SPQFASVNTI	TNQAPSAV	IMHQVSTRTD	STLWSQSD	QPNGVILDYE	LQYXKELSE	480
75	YNATAIKSG	NVTVTQGLKA	GALVVFQVRA	RTVAGYGRYS	GKQYQYMT	AEVQTSIQEK	540
	LPILLIGSSA	GLVFLAVV	IAIVCNRRR	FERADSEYTD	KLOHYTSGEM	TPGMKIYIDP	600
	FTYEDNEAV	REFAPKIDIS	CVKISQVIGA	GEFGEVCSGH	LKLPGKRELF	VAIKTLKSGY	660
	TEKQRDRFLS	EASIMQDFH	PNVHLEGVV	TKSTFVMIIT	EFMENGSLDS	FLRQMDGQFT	720
	VIQLVGLMRG	IAAGMKYLAD	MNYVHRDLAA	RNILLVSNLV	CKVSDFGLSR	FLEDDTSDPT	780
80	YTSALGGKIP	IKWTAPSAIQ	YKFTSASDV	WSYGIWMNEV	MSYGERPYND	MTNQDVINAI	840
	EQDYRLPPFM	DCPSALHQLM	LDCWQKDRNE	RPKFGQIVNT	LDMKILNPNS	LKAMAPLSSG	900
	INLPLLDRTI	PDYTSFNTVD	ENLBAIKMGQ	YKESPANAGF	TSFDVVSQNM	MEDILKVLGT	960
	LAGEQKKILM	SIQVMRAQMN	QIQSVEV				987

Seq ID NO: C246 Protein Sequence

Protein Accession #: NP_114148.1

	1	11	21	31	41	51	
5	MDARRVFQKD	LRVKKRLKKF	RYVKLISMST	SSSSDDSCDS	PASDNFANTR	LQSVREGCRT	60
	RQCRHSGPL	RVAMKFPARS	TRGATNKKAE	SRQPSSENSVT	DSNSDSEDES	GMNFLEKRAL	120
	NIKQNKAMLA	KIMSELESFP	GSFGRRLPL	GSDSQSRFR	RRTFPGVASR	RNPERRARPL	180
	TRSRSRILGS	LDALFMEEEE	EEDKYMVLVK	RKTVDGYMNE	DDLPRSRRSR	SSVTLPHIIR	240
	PVEITEGGV	GERLQQFSKR	RYITVHWALL	VINAVRRLLI	PKQTAETQTA	GAFEASSVAF	300
10	AFETVMVKRS	QMLCHIRTGI	ARLVEESATA	VSAGSEMDGV	RLGSLCI		347

Seq ID NO: C247 Protein Sequence
Protein Accession #: NP_036577.1

	1	11	21	31	41	51	
15	MENPSPAAAL	GKALCALLA	TLGAAGQPLG	GESICSARAP	AKYSITFTGK	WSQTAFPKQY	60
	PLFRPPAQVS	SLLGAHSSD	YSMWRKNQYV	SNGLRDFAEK	GEAWALMKBI	EAAGEALQSV	120
	HAVFSAPAVP	BGTGQTSAEL	EVQRHSLVS	FVVRIVPSPD	WFGVDSLUL	CDGDRWREOA	180
20	ALDLYPYDAG	TDSGFTFSSP	NFATIPQDTV	TEITSSSPSH	PANSFYYPRL	KALPFIARVT	240
	LVLRLQSPRA	FIPPAFVLPS	RDNEIVDSAS	VPETPLDCEV	SLWSSWGICG	GHCGRLGTKS	300
	RTRYVRVQPA	NNGSPCELE	EEACVVDNC	V			331

Seq ID NO: C248 Protein Sequence
Protein Accession #: NP_063947.1

	1	11	21	31	41	51	
30	MLQDFDSQDP	LNSLDVKPLR	KFRIPMETFR	KVGIPILIAL	LSLASIIIVV	VLIKVILDKY	60
	YFLCGQLPHF	IPRKQLCDGE	LDCPLGEDEE	HCVKSPFEGP	AVAVRLSKDR	STLQVLDSAT	120
	GNWFSACFDN	FTEALAEATAC	RQMGYSSKPT	FRAVEIGFDQ	DLDDVEITEN	SQELMRNNS	180
	GPCLSGSLVS	LHCLACGKSL	KTPRVVGGEE	ASVDSWPQV	SIQYDKQHYC	GGSLDPEWV	240
	LTAAHCFRKH	TDVFNKVKRA	GSCLKGSFPS	LAVAKIIE	FNPMYKDMND	IALMRLQFEL	300
	TFSGTVRPIC	LPFFDEELTP	ATPLNIIGWG	FTKQNGGKMS	DILLQASVQV	LDSTRCNADD	360
35	AYQGEVTERK	MCAGIPEGGV	DYQGDGSGGP	LMYQSDQHHV	VGIVSNGYGC	GGPSTPGVYT	420
	KVSAYLNNWY	NVWKAEI					437

Seq ID NO: C249 Protein Sequence
Protein Accession #: NP_003036.1

	1	11	21	31	41	51	
40	MCKVLLNIG	QOMLERKVVD	CSREETELSR	CLNTFDLVAL	GVGSTLGAGV	YVLGAVARE	60
	MGAPAIVISF	LIALAHSLA	GLCYGEFGAR	VPKTGSAYLY	SVYTVGELWA	FITGWNLLLS	120
45	YIIGTSSVAR	ANSATFDELI	GRPIGEFSST	HMTLNAPGVL	AENFDIFAVI	IILILTGLIT	180
	LGVKESAMVN	KIFTCINVLV	LGFIMVSGFV	KOSVKNQILT	EEDFGNTSGR	LCLNNDTKEG	240
	KPGCGPMFP	GFSGVLSGAA	TCFYAFVGF	CIATIGREV	NPKAIFVGI	VASLLICFIA	300
	YFGVSAALTL	MMFYFCLDNN	SPLPDAPKEV	GWGAKYAVA	VGSLCALBAS	LLGSMFPMER	360
	VYANAEDEL	LKFLANVND	RTKPIIATL	ASGAAVAVMA	FLFDLKLVD	LMSIGTLAY	420
50	SLVAACVLVL	RYQPEQPNLV	YQMASTDEL	DPADQNELAS	INDSOLGFLP	EAEMFSLKTI	480
	LSPKMEPSK	ISGLIVNIST	SLIALLIITF	CIVTVLGREA	LTKGALWAVE	LLAGSALLCA	540
	VTVGVINBQP	ESKTKLSFKV	PPILPILS	IFVNVYLMQ	LDQGTWVFA	VWMLIGFIY	600
	FGYGLWHESE	ASLDAQART	PDGNLDQCK				629

Seq ID NO: C250 Protein Sequence
Protein Accession #: NP_002767.1

	1	11	21	31	41	51	
60	MRAPHILHSA	ASGARALAKL	LPLMAQLWA	AEALLPQND	TRLDPFAYGA	PCARGSQPWO	60
	VSLFNGLESH	CAGVLVDQSW	VLTAHAGXNK	PLWARVGGDE	LLLLQGEQLR	RTTRSVVHPK	120
	YHQGGPILP	RRTDEHDLML	LKLARPVVP	PRVRALQLPY	RCAQPGDQCO	VAGWGTTAAR	180
	KVKYNKGLTC	SSITILSFKE	CEVFYFGVVT	NNMICAGLDR	QODPCQSDSG	GPLVCDITLQ	240
65	GILSWGVYFC	GSAGHPAVYT	QICKYMSWIN	KVIRSK			276

Seq ID NO: C251 Protein Sequence
Protein Accession #: XP_095088.3

	1	11	21	31	41	51	
70	MTAATAEPG	KVSPASPARS	TAGLPRAFLO	SLRTLLDILD	DWQRGCVHLR	BIQSLWVBAN	60
	ELPSGVLEGL	BQRRGPQQA	AVRSRRGGAV	PRGARAVPER	CAGTETRRGR	RCSGLQLRG	120
	GFRGCPADFC	ARGEHRRITI	TSQVDCGLLK	QMKLEQKEKE	VLLQGLEMA	QGRDWWYQQQL	180
	QQVQERQCL	QGRASADFG	AVGSRPLGR	LLFKVQEVAR	WLGEILLAEAC	AGRALPTSSS	240
75	GPFCASALTST	SSPGWQQQII	LMLEKQNLIL	TQEVTEKSER	ITQLBQKSAL	IKQLFEARAL	300
	SQQDGGLSPA	GPETIEPIITF	RLPVLTWAGA	LLSPHSPQLL	LPLSADSGGP	LHELPTWFF	360
	AVLLNVPSFG	KRTAHARLHF	HQPAEGGANQ	LGCAGEAAPP	TOGTLPHFES	HRTTCEPDSL	420
	GGPCPQSGDR	SWSHLGAADF	VAPAVAKVTP	NREDAAGSRH	GDICPLCPKG	LLTFRDIAIB	480
	FSLAENQCLD	HAQNLNLDV	MENYRNLF	LGMTVSKPDL	IACLEONKEP	QNIKRNEMAA	540
80	KHPVTCSEFN	QDLQEQSLK	DSLQKVIPT	YKCGHEHLQ	LKKCKKRVDE	CEVAKGGYND	600
	LNQLCLNTQN	KIQTHKCKVK	VFSKFSNENR	HNARYTGKKH	LKCKKYGKSF	CMPSHLNQH	660
	IHTKESYK	CECGKSPNH	SSSGTTHKRI	LTGKPYRCE	ECGKAFRNPS	NLTHKRIHT	720
	GEKPYACSEC	GQAFRRSSTL	TNKKRIHTGE	RPYKCECGK	AFSVSSALIY	HKRIHTGEKP	780
	YTCEECGKAF	NCSSTLKTHK	IHTGKPYT	CECGRTFNC	SSTVKAKRI	HTGKPYKCE	840

ECDKAPKWH8 SLAKHKIHT GBKPYKCSDS KALAKSSEVO KVVY9CDQENG IRVHKKKEIQ 900
 GNLVRNKNEN RTGLFQIRAA VRPNRDP5WG QQEGSLTDFI QRKEEPDLQN HYDHQNALED 960
 QRTQVGGGLL TFRDVIIEFS LEEWQCLDHA QQLYRDVLM ENYRNVLVSLG IAVSKPDLLT 1020
 CLEQNKEPWN IKRNMVTKH PDLPELGIK DSLQKVIPIR YGKSGHDNLQ VKTCKSMGEC 1080
 EVQKGGCNEV NQCLSTQTNK IFQTHKCVKV FGKFSNENRH KTRHTGKHHF KCKYKGSFC 1140
 MVSQHLQHBI IHTRENSYQC EEOCKPFNC6 STLSKHKRIH TGEKPYRCSE CGKAFWSST 1200
 LTKHRIHTG EKPYTCERG QAFERSSTLA NIKRIHTGEK PYTCSECGKA FSLSSSLTYH 1260
 KRIHTGEKPY TCCECGKAFN CSSTLKKHKI IHTGEKPYKC KECGKAPAPS STLWTHKRIH 1320
 TGEEPYKCEB CDKAPKNSSS LANHKSMTGT EKPYPKE 1357

Seq ID NO: C252 Protein Sequence
 Protein Accession #: NP_114433.1

1 11 21 31 41 51
 MASRSMRLLL LLSCLAKTGV LGDIIMRPSG APGWYPHKEN CYGYPRKLEN WSDALEECQS 60
 YGNGAHLASI LSLKEASTIA EYISGYQRSQ PIWIGLHDPQ KRQWQWIDG AMYLRSWSG 120
 KSMGGNKHCA EMSNNNFLT WSSNECNKRO HFLCKYRP 158

Seq ID NO: C253 Protein Sequence
 Protein Accession #: XP_051860.2

1 11 21 31 41 51
 MDGVNLSTEV VYKKGQDYRF ACYDRGRACR SYRVRFLCGK PVRPKLVTIT DTNVNSTILN 60
 LEDNVQSWKP GDTLVIASTD YSMYQAEFFQ VLPSCRSCAPN QVXVAGKPMY LEHGEIDGV 120
 DMRAEVLGLS RNIIIVMGEMZ DKCYPYRNHI CNFFDFDTFG GHKKFALGFK AAHLBGTGLK 180
 HMQQLVGGY FTHFLAGADV DERGGYDPFT YIRDLSHHT PSRCVTVHGS NGLLIKDVVG 240
 YNSLGHCFFT EDGPEERNTP DECLGLLVKS GTLLPSDRDS KMCKMITGDS YPGYIPKPRQ 300
 DCNAVSTFWM ANPMNNLINC AAAGSEETGF WFIFEHVPTG PSVGMYSFGY SEHIFLGKPY 360
 NNRAHSNYRA GMIIDNGVKT TEASAKDKRP FLSIISARYS PHQDADPLKP REPAIRHFI 420
 AYKMQDHQAN LRGDVWILDS CRFADNGIGL TLASGGTFPY DQSGKQIKN SLFVGSNGNV 480
 GTEMMDNRIN GPGLDHSGR TLPFGQNFPI RGIQLYDGP I NIQNCFTFRK VALGGRHTSA 540
 LAPRLNNAWQ SCPHNNVTGI AFEDVEITSR VFFGEPGEPW NQLDMQDKT SVFHDVDSV 600
 SEYPSYLTN NDMNLVRHPD CINVPDWRGA ICSGQYQMY IQAYKTSNLR MKIINKDFPS 660
 HPLYLEGALT RSTHYQQYQF VVTLQGYTI HWDQAPAEI AIWLINENKG DWIRVGLCYP 720
 RGTTFSLSD VHRLLKQTS KTGVPVRLQ MDKVEQSYPG RSHYWDKDS GLLFLKLKAQ 780
 NERKPAFCS MKGCEKRIK ALIPKNAGVS DCTATAYPKF TERAVVDVPM PKKLPQSGLK 840
 TKDHLFLEVM ESKQHFHFL WNDFAIEVD GKYPSSSDG IQVVVIDGNQ GRVVSHTSFR 900
 NSILQGIWQ LPNYVATIPD NSIVLMASKG RYVSRGPWTR VDEKLGADRG LKLKQMAFV 960
 GFGSGFRPM VTLDTEHKA KIFQVVPFV VKKKKL 996

Seq ID NO: C254 Protein Sequence
 Protein Accession #: NP_055188.1

1 11 21 31 41 51
 MTALSSENSE FQYQLRQTNQ PLDVNYLLFL IILGKILNT IILGMRKNT CQNFMEYFCI 60
 SLAFVDLLL VNIISILYFR DFVLLSIRFT KYHICLFTQI ISFTYGLHY PVPLTACIDY 120
 CLMFSTTKG SFKQKLEFF FVILIWISV LAYVLGDPAL YQSLKAQNAV SRHCFFVST 180
 QSYWLSFPMV MIFVAFITC WEEVTLVQA IRITSYMET ILYFPFSSHS SYTVRSKKIF 240
 LSKLIVCLPS TMLPFVLLQV IIVLLKQIP AYIEMNIPWL YFVNSFLIAT VYVFNCKELN 300
 LKIDGLPLDP FVNNKCCFIP LTIPNLEQIE KPISIMIC 338

Seq ID NO: C255 Protein Sequence
 Protein Accession #: Bos sequence

1 11 21 31 41 51
 MALVLGSLLL LGLCGNSFGS QPSSSTDAPK AMNYELPATN YETQDSHKAG PIGILFELVH 60
 IFLYVQVQPD PFEDTLRKL QKAYESKIDY DKIVVYBAGI ILCCVLGLIF IYLMPLVGYF 120
 PCMCRCCKNK GSEMHQROKE NGPFLRKCFA ISLLVICIII SIGIFYGFVA NHQVTRIKR 180
 SRLGADSNFK DLRTLLNETP BQIKYILAQY NTKDKAFTD LNSINSVLGG GILDRLRPNI 240
 IFVLDEIKSM ATALKETKEA LENMNSTLKS LKQSTQLSS SLTSVKTSLR SSLNDPLCLV 300
 HPSSETCNSI RLSSLSQLNSN PELRQLPFVD AELDNVNVVL RTDLDDLGLVQ GYQSLNDIPD 360
 RVQRQTITVV AGIKRVLNSI GSDIDNVTOR LPIQDILSAF SVYVNNTESY IRRMLPLLE 420
 YDSYWNLGLL VICSLTLIV IFYILGLLGG VCGYDRBATP TTRGCVENIG GVFLMVGVGL 480
 SPLFCWILMI IIVLTFVFGA NVEKLICEPY TBKELPRVLD TPYLLNEDWE YLGGKLEPNK 540
 SKMKLTFEQV YSDCKNNGT YGTILHONSF NISEHLNINE HTGSISSELE SLKVNINIFI 600
 LGAAGRENLO DPAACGIDEM NYDSVLAQTG KSPAGVNLIS FAYDLEAKAN SLPPGNLENS 660
 LKRDAQTIKT IHQQRVLPIE QSLSTLYQSV KILQRTGNGL LERVTRILAS LDPAQNPIFN 720
 NTSSVILBET KRYGRTITGY FEHYLQWIEF SISEKVASCK PVATALDTAV DVFLCSYIID 780
 PLMLFWFGIG KATVFLPAL IFAVKLAKYV RRMDSDEVVD DVETIPMKGM ENGRNGYHKD 840
 HVGIGHNFVM TSPSQB 856

Seq ID NO: C256 Protein Sequence
 Protein Accession #: NP_149038.1

1 11 21 31 41 51
 MKAIHITLL ALLSVNTATN QGNSADAVTT TETATSGPTV AAADTTETNF PETASTTANT 60
 PSFTATSPA PPIIISTHSSS TIPTAPPPII STESSSTIFI PTAADSEST NVNSLATSDI 120
 ITASSPDNGL ITMVPSETQS NNEMSPTTED NQSSGPPTGT ALLETSTLNS TGPSPQCDD 180
 PCADNSLCVK LHNTSFLCLL EGYVNSSTC KKGKVPFGKI SVTVSETFDF EKHSMAYOD 240

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1
11
21
31
41
51
300
360
420
480
512

Seq ID NO: C257 Protein Sequence
Protein Accession #: NP_001423.1

10
1
11
21
31
41
51
60
120
169

Seq ID NO: C258 Protein Sequence
Protein Accession #: AAC63902.1

20
1
11
21
31
41
51
60
120
180
240
300
360
403

30
Seq ID NO: C259 Protein Sequence
Protein Accession #: NP_037504.1

35
1
11
21
31
41
51
60
120
180
184

40
Seq ID NO: C260 Protein Sequence
Protein Accession #: Bos sequence

45
1
11
21
31
41
51
60
120
180
240
300
360
420
480
540
600
660
720
780
840
900
910

Seq ID NO: C261 Protein Sequence
Protein Accession #: NP_000575.1

65
1
11
21
31
41
51
60
99

70
Seq ID NO: C262 Protein Sequence
Protein Accession #: NP_005594.1

75
1
11
21
31
41
51
60
120
180
240
300
360
420
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540
600
660

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IEEKETEWN KCFMAASVAS TNRDEALDKV YEEIEKDLIL LGATAIEDKL QDGVFETISK 720
LAKADIKINV LTGDKKETAE NIGFACELLT EDTTICYGED INSLHARME NQRNRGGVYA 780
KFAPPPQBSF FPPGQNRALI ITGSHLINEIL LEKTKRKNKI LKLKPPRTEE ERMRTQSKR 840
RLEAKKEQSQ KNFVDLACEC SAVICCRVTP KQKAMVVDLV KRYKKAITLA IGDGANDVM 900
IKTAHIGVGI SQQEGMQAVM SSDYSFAQFR YLQRLLLVHG RNSYTRMCKP LRYFFYKXFA 960
FTLVHFVYSF FNGYSAQTAY EDWFITLYNV LYTSLPVLLM GLLDQVSDX LSLRFPGLYI 1020
VGQDRLLFNY KRFPVSLHNG VLTSMLFFI PLGAYLQTVG QDGRAPSDYQ SFAVTIASAL 1080
VITVNFQIGL DTSYNTFVNA PSIFGSIALY FGIMFDFHSA GIHVLFPFSAF QFTGTASNAL 1140
RQPYIWLTI LTVAVCLLPV VAIRFLSMTI WPSSEDKIQK HRRLKAEQ WQRQQVFR 1200
GVSTRSAYA FSHQGYADL ISSGRSIRKK RSPDLAIVAD GTAEYRTGD S 1251

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Seq ID NO: C263 Protein Sequence
Protein Accession #: XM_044533

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1 11 21 31 41 51
| | | | |
MLRTAMGLRS WLAAPWGAIP PRPPLILLLL LLLLLQPPPP TWALSFRISL PLGSEERPFLL 60
RFEARHISNY TALLSRDGR TLYVGAREAL FALSSNLSP PGGEYQELIW GADAEKKQCC 120
SFKGKDFQSD QNYIKILLP LSGSHLFTCS TAAPSPMCTY INMENFTLAR DEKGNVLIED 180
GKGRCTPFDN FKSTALVVDG ELYTGTVSSF QGNDPAISRS QSLRPTKTES SLNWLQDPAF 240
VASAYIPBSL GSLQGDQDKI YFFSETGQE FEFENTIVS RIARICKGDE GSERVLQQRW 300
TSFLKAQLLC SRPDDGFPEF VLQDVFTLSP SPQDWRDILF YGVFTSQWHR GTTBSSAVCV 360
PTMKDVQRVF SGLYKEVNRE TQQNYTVTSP VPTPRPGACI TNSARERKIN SSLQLPDRVL 420
NFKLDRFLMD QVRSRMLLL QPQARYQRA VHRVPGHLHT YDVLFLGTGD GRHLKAVSVG 480
PRVHIIEELQ IFSSGQPQCN LLLDTHRGLL YAAHSGGVVQ VPMANCSLYR SCGGCLLARD 540
PYCAWSSSSC KEVSLYQQL ATRPWIQDIE GASAKDLCSA SBVSPSPFVP TGEKPCQVQ 600
FQNTVNTLA CPPLSNLATR LMLRNGAPVN ASASCHVLPT GDLLLVGTQQ LGEPQCWSLE 660
EGFQQLVASY CPEVVEDGVA DQTDEGGSVP VIISTSRVSA PAGGKASWGA DRSTWKEFLV 720
MCTLPVLAVL LPVLFLLYRH RNSMKVFLKQ GECASVHPKT CPVVLFPETR PLNGLGPPST 780
PLDHRGYSGL SDSPGGSRVF TESEKRPLSI QDSFVEVSFV CPRPRVRLGS BIRDGSV 837

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Seq ID NO: C264 Protein Sequence
Protein Accession #: NP_008950.1

35
40

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1 11 21 31 41 51
| | | | |
MASQNRDPA TSVAAARKGA EFSGGAARGP VGRKLQQLM TLMMSGDKGI SAPPESDNLF 60
KNVGTIHGA QTVYEDLRYK LSELPFSGYP YNAPTVEFLT PCTHPNVDTO GNICLDILKE 120
KWSALYDVRT ILSISQSLG EPNIDSPLNT HAABLKNKPT AFKKYLQETP SKQVTSQEP 179

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Seq ID NO: C265 Protein Sequence
Protein Accession #: NP_055399.1

45
50
55

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1 11 21 31 41 51
| | | | |
MGRGNGFLFG LLGAVWLLSS GHGEEQPPET AAQRFCQQVS GYLDDCTCDV ETIDRFNNYR 60
LEPRLQKLLS SDYFRYKYVN LKRPCFWMND ISQCRRDCA VKPCQSDDEV DGKKSASYKY 120
SEANNLIEE CEQAERLAGV DESLSEETQX AVLQWTKHDD SSDNPFCEADD IQSPAEYVD 180
LLLNPRYTG YKSPDAWKI NVIYENCYK PQTIKRPLNP LAGGQGTSEE NTFYSWLEGL 240
CVERAFYRL ISGLHASINV HLSARYLLQE TWLEKKWGHN ITEFQQRFDG ILTEGEGPFR 300
LKNLYPLYLI ELRLASKVLE FFERPDQQLF TGNKIQDEN KMLLLEILHE IKSFFLHFD 360
NSFFAGDKKE ARLKEDFRL HFRNISRIKD CVGCFKCLW GKLTQQLGT ALKILFSEKL 420
IAMPBSSGGS YEPHLTRQEI VSLFNAFGRI STSVKELNLF RNLLQNIH 468

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Seq ID NO: C266 Protein Sequence
Protein Accession #: NP_002879.1

60
65

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1 11 21 31 41 51
| | | | |
MQPRRQRLPA FWSGPRGPRP TAPLLALLLL LAPVAAPAGS GGPDDPGQPQ DAGVPRRLIQ 60
QKAAALHFF NFRSGSPSAL NVLAEVQEGR AWINKEGCK VHVVPSTERY NPESLLQEGE 120
GRLGKCSARV FFKNQKPRPT INVTCTRLIE KKKRQEDYL LYKQMKLKN PLEIVSIPDN 180
RGHIDPSRLI IWDLAFLGSS YVMWENTIQV SHYYLAQLTS VRQVVRKT 228

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Seq ID NO: C267 Protein Sequence
Protein Accession #: NP_005400.1

70

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1 11 21 31 41 51
| | | | |
MSVKMAIAL AVILCATVVQ GPFMPKRGRC LCIGPGVIAV KVADIEKASI MYPNNCDKI 60
EVIITLKENK QQRCLNFKSK QARLLIKKVE RKNF 94

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Seq ID NO: C268 Protein Sequence
Protein Accession #: FGENSEH predicted

75
80

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1 11 21 31 41 51
| | | | |
MLRQVLRRLG QSFCHRLGLC VSRHPVFFLT VPAVLITITF LSALNRPQPE GDLERLVAPS 60
HSLAKIERSL ASSLFPLDQS KSLYSDLHT PGRYGRVILL SPTGDNILLQ AEGILQTHRA 120
VLEMKVNHKG YNTYFSELV LKNQDKKCVL DDIISVLEDL RQAASVSKTT ARVQVRYPNT 180
KLVKCSFQML LPYKRAALHF LP 202

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Seq ID NO: C269 Protein Sequence
Protein Accession #: NP_002429.1

1 11 21 31 41 51
 5 MRLELLLVFA SVIPGAVLLL DTRQFLIYNE DHRKCVDAVS PSAVQTAACN QDAESQKFRW 60
 VSESQIMSVFA FKICLGVPSPK TDWVAITLYA CDSKSEFOKW ECKNDTILGI KGEDLFENY 120
 NRQKKNIMLY KSGSLWSRWK IYGTTONLCS RGYEAMYTL GNANGATCAF PFKFKENKWA 180
 DCTSAGRSOG WLWOGTTTDDY DTDKLFQYCP LKFEGBSESLW NKDPLTSVSY QINSKSAITW 240
 HQARKSCQQQ NAEILLSITEI HEQTYLTGLT SSLTSGLWIG LNSLSFNISGW QWSDRSPFRY 300
 10 LNWLPGPSFA SPGKSCVSLN PGKNAKWNEL ECVQKLOYIC KKGNTLNSF VIPSESQVPT 360
 HCPSQWNPYA GHYCKIHRDE KKIORDALT CRKGGDLTS IETIEELDFI ISQLGYEPND 420
 ELNIGLADIK IQMYFEWSDG TPVTPTKMLR GEPSEHNNRQ EDCVVMKGD GYWADRGCSEW 480
 FLGYICMKKS RSGQPEIVEV EKGCRKGWKK HHFYCYMIGH TLSTFAEABQ TCNNENAYLT 540
 TIEDRYEQAF LTFVGLRPE KYFWTGLSDI QTKGTQWNTI EREVRFTHWN SDMPGRKPGC 600
 15 VAMRTGIAGG LMDVLKDEK AKFVCKHWAE GVTHTPKFTT TPEPKCPEDW GASSRTSLCF 660
 KLYAKGHEK KTWFSRDFC RALGGDLASI NMKEEQTIW RLITASGSYH KLFNLGLTYG 720
 SPSEGFTWSD GSPVSNYWA YGEPNNYQNV EYCGELKGD TMSWINDICE HLNWICQIQ 780
 KSGTPKPEPT PAPQDNPPVT EDGWVIYKDY QYFSEKKEK MDNARAFCKR NFGDLVSIQS 840
 ESZKPLWKY VNRNDQASAY FICLLISLDK KFAHMDGSKV DVSQWATGEP NFANEDENCV 900
 20 TMYENSQFVN DINCQENAF ICQRHNSIN ATTVMPTMP VPSCCKE3WN FYSNCKCFKIF 960
 GPMEEERKNW QEARKACIGF GGNLVSIGNE KEQALTYEM KDSFSAWIG LMDVNSHTF 1020
 LWDIDGROVRY TNWQKGYPGS RRSLSYEDA DCVVIIGAS NEAGKWMDDT CDSKRGYICQ 1080
 TRSDPSLTNP PATIQDGFV KYGSSYSILM RQKQWHEAE TYCKLHNSLI ASILDYFSA 1140
 FANLQMETSN ERVWIALNSN LTINQYTWTD KWRVRYTNWA ADEPKLKSAC VYLDLGGYK 1200
 25 TAHNCSEYF LCRRSGEIPA TEPFQLPGRC PESDETAMIP EREKCYIES SYTRNMGQAS 1260
 LECLEMGSSSL VSIESAESS FLGYRVEPLK SKTNFWIGLF RNVEGTMLWI MNSPVSFVNW 1320
 MTGDPGGERN DCVALHASSG FWSNIHCSSY KGYICKRPKI IDAKPHELL TTKADTRKMD 1380
 PSKPSNNVAG VVIIVILLIL TGAGLAAYFF YKKRRVELPQ EGAPENTLYF NSQSSPGTSD 1440
 MEDLVGNIEQ NEHSVI 1456

Seq ID NO: C270 Protein Sequence
 Protein Accession #: Bos sequence

1 11 21 31 41 51
 35 MVLLHMCLLN LLFPLSSRTQ KLETRDEELF QMQRDKAFF HDSSVIPDGA HISSYLFEDT 60
 PKRYFFVVEE DNTPLSVTV PCDAFLWKL SLQELPEDRS GEGSGDLEPL EQKQIINE 120
 EGTLEFSYKG NDVSYFISSS SPGLYQLDL LSTEKDTDFK VYATTFPESD QFYPELFYDP 180
 RVDVTSIGRT TVTLAWKPSF TASLLKQPIQ YCVVINKSEN FEELCAVEAK LSADAFMMA 240
 40 PKPGLDFFP DPAHFGFSPD NSGKERSFOA KPSPKLGRHV YSRPKVDIQK ICIGNKNIFT 300
 VSDLEKEDQY YFDVFNININ SNNSTAYVGT PARTKEBAQ KTVELKDGKI TDVFKRKG 360
 KFLRFAPVSS HQKVTFFIHS CLDAVQIQVR RDGKLLLSQN VEGIQQQLR GKPKAKYLVR 420
 LKGNKRGASM LKLLATRPRT KQSFPSLPED TRIKAFDKLR TCSSATVAML GTQERNKFCI 480
 YKKEVDNMYN EDQKREBQK CLGPDIRKKS EKVLCRYFHS QNLQKAVTTE TTEGLQPGKS 540
 45 YLLDYVYIGH GGSVVKQSK VVTRKFC 568

Seq ID NO: C271 Protein Sequence
 Protein Accession #: AAH34229.1

1 11 21 31 41 51
 50 MEKVQLEFEN QMEKKIQEF RSTRNKEED RESSEYWNKS GKVGKLVNQS YHMSQKGNV 60
 VKFSAGKVKL KLLKEQIQEP VKFTVNYKMA NSSECEKPKI NGKVCQCEM KAALLVCLC 120
 GEDYCSGCPA NVHQKGLALK HRTTLQARS QILFNVLDAV RQFEDVMPD EPKEENNSTK 180
 55 ESKIQHFKK SVLLQRSSSE VEITMKRAQ RTKPKSLLC EGSFDREASA QSFQSVLSQW 240
 RTGNEDDNKK QNLAAVKDS LEECEVQTNL KIWREPLNIE LKEDILSYME KWLKKHRT 300
 PQBQLFKCYQ IRSHHMKPL VMESVLKMKI MKIVMVRPK YNTQLFYCQ 349

Seq ID NO: C272 Protein Sequence
 Protein Accession #: NP_078963.1

1 11 21 31 41 51
 60 MEKMLWKKER RTPQQLFNM LSDTFPHFHE TTGDAQCSQN ENDESDGEE TKVQHTALLL 60
 PVETLNIERP EPPLKIVELD DTYEEFEEA ENIVPYKVKL ADADSQRSCA FEDCQKNSFF 120
 65 YENGHQHVV FDKGRDFLN LCLRNSSTYY KONSKEGEN TDFDNIVDPD VYSSDIEKIE 180
 ESTSFERNLK EKNIGLESNQ KSDDSCVBLE SKDTLLGRDI EKAPIEEKLS QDIKESLELS 240
 NLYKPSFEE SKTKSSILL QELACRSKPI TKQYQGLERF FIFDINERLN LLPSHRLECN 300
 NSSTRITLAE DREMFDPHSI SEYADNAIVL GVLQGAQSPS SSRKQQRMGQ KQRPSTANF 360
 70 PLSNSVKES SCLSSSHPRS ESAAAQSSSR AAGEISEIEY IDITDQNELS LDDTTDQHTL 420
 DMLEKELQVL RSLADTSEKL YSLTSEEFDP FSSQSLNISQ ISTDFLKTSE VRGPCGVDEL 480
 SCSEGRDTKIQ SLLSLESSE DEEEDFINK QHVITLPMK ST 522

Seq ID NO: C273 Protein Sequence
 Protein Accession #: NP_005399.1

1 11 21 31 41 51
 75 MKVSAVLLCL LMTAAFPNQ GLAQPDALNV PSTCCFTFSS KKLISQLRKS YVITTSRCPQ 60
 KAVIPRTKLG KRICADPKK WVQNYMKHLG RKARTLKT 98

Seq ID NO: C274 Protein Sequence
 Protein Accession #: BAC05158.1

1 11 21 31 41 51

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1	11	21	31	41	51	
MFLLTGGVSL	KSAEKNPDPT	WLQDKSWEET	CRASEFPAPR	GLRQHPCRHI	YEWREIYDSK	60
EPHNAKFFAP	MDKNTNELQK	IIILRCLRPD	KITPAITNYV	TDKLGKKFVE	PPPPDLTKSY	120
LDSENCTIPLI	PVLSPGADFM	ASLLKFPANDK	SMGSKFKQAI	SLGQGGQPIA	AKMKAAIEE	180
GTWVCLQNCB	LAVSWMPMLE	KICEDFTSET	CNSSFRLWLT	SYPSKKFFVT	LLQNGVRMTN	240
EPPTGLRLNL	LQSYLTDPVS	DREFFKGCRC	KELLFINEYD	TTFEAIISYL	TGSCNYGGRV	300
TDDWDRRLLL	TMLADFYNLY	IVENPHYKFS	PSGNYFAPPK	GYEDYIEFI	KKLPTQHPH	360
IFGLHENVDI	SKDLQQTCTL	FESLLLTQGG	SKQTGASGST	DQILLEITKD	ILNKLPSDFD	420
IEMALRKYPV	RYEESMNTVL	VQEMERFNNL	IIITIRNLTLD	LEKAIKGVVV	MDSALEALSS	480
SLLVGKVPSE	WAKRSYPSLK	PLGSYITDFL	ARLNFLQDWY	NSGKPCVFWL	SGFFPTQAFI	540
TGAMQNYARK	YTFPIDLLGY	EFEVIPSPTS	DTSPEDGVYI	HGLYLDGARW	DRESGLLAEQ	600
YPKLLFDLMP	IIWIKPTQKS	RIIKSDAYVC	FLYKTSERKG	TLSTTGHSTN	FVIAMLLKTD	660
QPTREHWIKRG	VALLCQLDD					679

Seq ID NO: C275 Protein Sequence
Protein Accession #: AAA60212.1

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1	11	21	31	41	51	
MAESHELLQWL	LLLLLPTLCGP	GTAANTTSSL	ACAQGPPEFWC	QSLAQALQCR	ALGHCLQEVN	60
GHVGADDLQ	ECEDIVHILN	KMAKEAIPQD	TMRKFLBQEC	NVLPLKILMP	QCQNVLDYF	120
FLVIDYFQNG	TDSENGICMHL	GLCKSRQPEP	BQEPGMSDFL	PKFLRDPLFD	PLLDKGLVLPV	180
LFGALQARPG	PTQDLSEQQ	FPIPLPYCWL	CRALIKRIQA	MIPKGLAVA	VAQVCRVVP	240
VAGLICQCLA	ERYSVILLDT	LLGRMLPQLV	CRVLVLRCSMD	DSAGPRSPFG	EWLPRDSECH	300
LCMSVTTQAG	NSSEQAIPQA	MLQACVGSWL	DREKCKQFVE	QHTPQLLTIV	PRGWDANTTC	360
QALGVCGTMS	SPLQCCHSPD	L				381

Seq ID NO: C276 Protein Sequence
Protein Accession #: NP_631911.1

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1	11	21	31	41	51	
MLGCGIPALG	LLLLLQGSAD	GNGIQGFFYP	WSCBEDIWDR	ESCGGQAAD	SPNLCLRLRC	60
CYRNGVCYEH	RPDENVRRKH	MNALVNTCSG	LLLLSCSICL	FWWAKRDVL	HMPGFLAGPC	120
DMKSVSLLS	KRGTKKTPS	TGSVPVALSK	ESRDVEGGTE	GBSTEBGEET	EGEERED	177

Seq ID NO: C277 Protein Sequence
Protein Accession #: NP_473364.1

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1	11	21	31	41	51	
MKLVTIFLLV	TISLCSYSAT	AFLINKVPLP	VDKLAPLPLD	NILPFMDPLK	LLKLTIGISV	60
EHLVSELRKC	VNELQPEASE	AVKKLEALS	HIV			93

Seq ID NO: C278 Protein Sequence
Protein Accession #: F08NBSH predicted

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1	11	21	31	41	51	
MPLSYAYKNA	ETLAGRHTSS	WMSRGAYQRR	NTRAAGRPEE	CTDENWHAGR	TRGINLGQLE	60
ERCSDEVFGVS	FFWVVRGLAG	SGAKLQTFTP	AQEGAPTQOR	QARALLKCRQ	SGRFGRCGAE	120
SERARDAAML	SPLSAAMRNY	PTSSTIPERE	SYSPTETIAHK	SYSCELEDMK	ISMAKSGPGL	180
DSLDILEDEGE	SGSEFLVTHL	YFLGVVVTGM	BQLDFETGPN	IFDLQIYVKD	EVGVTDLQVL	240
TVQVTDVNEP	PQPGCNLAED	HLRADQPHEN	AHSHTYVRVV	ATALARHLRL	SSIGSPFLGT	300
FCVVVGMDYF	LISPFKSPRM	SANGTLFSTT	ELDFEAGHRS	PHLIVEVRDS	GGLKASTELQ	360
VNIVMLNDEV	PRFTSPTRVY	TVLEELSPGT	IVANITARDP	DDEGEPSEHL	YSITTVSKYP	420
MINQLTGTIQ	VAQRIDRDAG	ELRQNPTISL	EVLVKDRPYG	QGENRIQITF	IVEDVNDNPA	480
TQCKFTFRSS	LHPALCSKTL	TWMDTVLDCF	HAADKDIPVT	GRPTKERGLI	GLTVPHGWS	540
LTIMABEKEE	QVTSYMDGSR	QRDRACVGLI	LLIKPSDLMR	LSHYHNNNSG	KTCFHDSSIS	600
YQVPPCTCRN	SRIQATNNED	TSSVTVTWNI	LEKNDKPKIC	TPNSYFLALP	VDLKVGNTIQ	660
NFKLCITOLD	SSPRSFRYSI	GGGNVNNHFT	FSPNAGSNVT	RLILTSRFDY	AGGFQKIMDY	720
KLLVYVTDGN	LMSDRKKABA	LVETGTVTLS	IKVIPHPTTI	ITTTTPRPRVT	XQVLRKNVYS	780
PSAMVVPFVI	TIGSILLGLL	LVYLVVLLAK	ATERRCPCKT	GKNKEPLTKK	GETKTAERDV	840
VVETIQMNTI	FDGEAIDPEP	EQASLELYAL	LPSCCDPSPV	TLRKVVQCGE	SEETQCCSGH	900
ITLPSKIPVD	DPREQSTGLQ	GDPEVWTLCP	AVKVVVGSFQ	AERCIRLALS	LKKYSSD	957

Seq ID NO: C279 Protein Sequence
Protein Accession #: XP_168571.1

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1	11	21	31	41	51	
MINQLTGTIQ	VAQRIDRDAG	ELRQNPTISL	EVLVKDRPYG	QGENRIQITF	IVEDVNDNPA	60
TQCKFTFRSS	VPERTAKGTL	LLDLNKFCTD	DDSEAPNNRF	NFTMPSGVGS	GSRLFLQDPAG	120
SGKIVLIGDL	DYEMPSNLAA	GNKYTVIIQV	QDVAPPYYKN	NVYVYILTSP	ENEFPLIFDR	180
PSYVFDVSEK	RPAQGHLSGP	BEKRLLSICM	VRAVCHHFLG	LIASGSPRPV	GRPIGQSHRP	240
TLPLQDWEEQ	GTSCKERRNE	DCRERRRGNN	YPDEHYL			277

Seq ID NO: C280 Protein Sequence
Protein Accession #: NP_005257.2

80

1	11	21	31	41	51	
MGEWSFLGNP	LEEVHKKHSTV	VGVKVLTVLF	IFRMLVLGTA	AESSWGDEQA	DFRCDTIQPG	60
CQNVCDQAF	PISHIRYVNL	QIIFVSTPSL	VYMGHAMETV	RMQEKRLIRE	AERAKSVRGS	120

GSYEYFPAEK AELSCWEEGN GRALQGTILL NTVVCSILTR TMEVGFIVG QYFIYGIFLT 180
 TLHVCRRSPC PHPVNCVSR PTEKNVFIVP MLAVAALLSL LSLAELYHLG WKKIRQRFVK 240
 PRQMAKQQL SGPSVGIVQS CTPPPDFNQC LENGPGGKFP NPPSNNMASQ QNTDNLVTEQ 300
 VRQEQQTGE GFYQVYQK PEVPGVSPG HRLPHGYHSD KRRLSKASSK ARSDDLVS 358

Seq ID NO: C281 Protein Sequence
 Protein Accession #: NP_055274.2

1 11 21 31 41 51
 MYLSICCCFL LWAPALTKN LNVSPPEEQ AGTVIGNIGR DARLQGLPP AERGGGGRSK 60
 SSSYRVLENS APHLIDVDAD SGLYTKQRI DRESLCRHA KCQLSLEVFA NDKEICMIKV 120
 EIQDINDNAP SFSSDQIEMD ISENAAPGTR FPLTSAHDPD AGENGLRTYL LTRDDHGLFG 180
 LDVKSRRGDT KFPELVQKA LDREQQNHHT LVLTAIDGGE PPRSATVQIN VKVIDSNDNS 240
 PVFAPSylv ELPENAPLGT VVIDLNATDA DEGPNGEVLY SFSSYVEDRV RSLFSIDPKT 300
 GLIRVKGMLD YEENGMLID VQARDLGPNP IPAHCKVTVK LIDRNDNAPS TGFVSVRQGA 360
 LSEAAPPQTV IALVRVTRDR SGKNGQLQCR VLGGGGTGGG GGLGGPGGSV PFKLEENYDN 420
 FTVVTRDPL DRETQDEYNV TIVARDGGSP PLNSTKFAI KILDENDNPP RPTKGLYVLQ 480
 VRENNIPGEY LGSVLAQDPD LGQNGTVSYS ILPSHIGDVS YTYTVSVNPT NGAIYALRSF 540
 NFEQTKAFEF KVLAKDSGAP AELESNATVR VTVLDVNDNA FVIVLFTLON DTAELOVFRN 600
 AGLGLVSTV RALSDPGES GRITYEIVDG NDDHLFEIDP SGGEIRTLHP FWEDVTPVVE 660
 LVVKVTDHKG PTLSAVKLI IRSVGSLPE GVPRVNGEQE HWDMSLPLIV TLSTISILL 720
 AAMITIAVRC KRENKEIRTY NCRLAEYSHP QLGGGKGGK KINKNDIMLV QSEVERNAM 780
 NVNMVVSSES LATSEMYFDY QTRLPLSSPR SEVMYLPKAS MNLTVPQGHA GCRTSPTGGG 840
 TNASETPATR MSIIQTDFP AEPNMGSRQ QVQGISVAP RLRTQKEPA 889

Seq ID NO: C282 Protein Sequence
 Protein Accession #: NP_055592.1

1 11 21 31 41 51
 MELCRSLALH GSGSLGMFCL IALSTDFWFE AVGPTHSAHS GLWFTGHGDI ISGYIHVTQT 60
 FSIAMVLWAL VSVSLVLSC FPSLFPPGEG PLVSTTAAPA AAIMVVMAMA VYTSEWRDQP 120
 PEPQIQTFES WSFYLGWVA ILLCTGALS LGAECCGPRP CYSTL 165

Seq ID NO: C283 Protein Sequence
 Protein Accession #: NP_006424.2

1 11 21 31 41 51
 MATWALLLLA AMLLGNPGLV FSLSPPEYD LARAHLDDE KSCPCLAQEG PQGDLITKTQ 60
 ELGRDYRTCL TIVQKIKKMV DKPTQRSVSN AATRVCTGR SRWRDVCNRF MREYQSRVTQ 120
 GLVAGETAQ ICBDLRLCIP STGPL 145

Seq ID NO: C284 Protein Sequence
 Protein Accession #: NP_005594.1

1 11 21 31 41 51
 MKVSAALAV ILIATALCAP ASASFYSST TPCCFAYIAR PLBRAHIKEY FTSGRKCSNP 60
 AVVFVTRKNR QVCANPEKKV VREYINSLEM S 91

Seq ID NO: C285 Protein Sequence
 Protein Accession #: NP_071437.1

1 11 21 31 41 51
 MAPGRAVAGL LLLAAGLGG VAEGPGLAFS EDVLSVFGAN LSLSAALQEH LLEQMGAASR 60
 VGVPEPGLH FNQCLTAEI FSLGFSNAT QITSSKFSVI CPAVLQQLNF HPCEDRPFHK 120
 TRPSESEVWG YGFLSVTIIN LASLLGLILT PLIKSYFEPK ILYFFVGLAI GTLFSMAIFQ 180
 LIPEAFGFDP KVDYSVEKAV AVFGGEYLLF FFERMLKMLL KTYGQNGHYH FGNDNFGPQE 240
 KTHQPKALPA INGVTYANP AVTEANGHIH FDNVSVSLQ DGKKGPSST CLKGPKLSEI 300
 GTIAWMITLC DAHNFIDGL AIGASCTLSL LQGLSTSAI LCSEFFPELG DFWILLNAGM 360
 STRQALLNF LSACSCYVGL AFGILVGNF APTIIFALAG GMFLYISLAD MPFEMDMLR 420
 EKVTRKTRDF TFFMIQNAGM LTGPTAILL TLYAGEIELE 460

Seq ID NO: C286 Protein Sequence
 Protein Accession #: NP_004175.1

1 11 21 31 41 51
 MPNSEPABL ELFNSIATQG ELVRSKAGN ASKDEIDSAV KMLVSLKMSY KAAAGEDYKA 60
 DCPPENPAPT SNHGDATEA EEDFVDPTV QTSSAKGIDY DKLLIVRFGSS KIDKELINRI 120
 ERATQGRPHH FLRRGIFFSH RDMNQVLDA ENKKPFYLYT GRGPSSEAMH VGHLEPIFT 180
 KWLQDVFNVP LVIQMTDDEK YLWKDLTLDQ AYGDVAVNAK DIIACGPDIN KTFIFSDLDY 240
 MGMSGGFYKN VVKIQKBVTF NQVKGIFGFT DSDCIGKISF PAIQAAPSFS NSFFQIFRDR 300
 TDIQCLIPCA IDQPYFRMT RDVAPRIGY KPALLHSTEF PALQGAQTKM SASDPKSSIF 360
 LTDITAKQIKT KVNKHAFSGG RDTIEERQF CGNCDVDVSF MYLTFLEDD DKLEQIRKDY 420
 TSGAMLTGEL KKALEIVLQF LIAEQARRK EVIDEIVKEF MTPRLKSEDF Q 471

Seq ID NO: C287 Protein Sequence

Protein Accession #: NP_004929.1

	1	11	21	31	41	51	
5	MTVFRQENVD	DYDITGEELS	SGQFAVVKKC	REKSTGLQYA	AKFIKKRRTK	SSRRGVSRSD	60
	IEREVSILKE	IQHPNVITLH	EVYENKIDVI	LILELVAGGE	LFDFLAEKES	LTEBEATEFL	120
	KQILNGVYYL	ESLQIAHFDL	KPENIMILDR	NVPKPRIKII	DFGLAHKIDF	GNEFKNIFGT	180
	PEFVAPEIVN	YEPLGLEADM	WSIGVITYIL	LSGASPFGLD	TKQETLANVS	AVNYEFDEY	240
10	FSNTSALAKD	FIRRLIVKDF	KCRMTIQDSL	QHPWIKPKDT	QQALSRKASA	VNMEKFKKFA	300
	ARKWKQSVR	LISLCQRLSR	SFLSRSNMSV	ARSDDTLDEE	DSFVMKAIH	AINDDNVPL	360
	QHLLGSLSNY	DVNPQNKHGT	PPLLIAAGCG	NIQILQLLIK	RGRIDVQCK	GGSNVYVWAA	420
	RHGHVDTLKE	LSENKCPDVD	KDKSGEMALH	VAARYGHADV	AQVTCASAAQ	IPISRTKEEE	480
	TPFHCAAMHG	YYSVAKALCE	AGCNVNIKNR	EGETPLLTAS	ARGYHDIVEC	LAEGGADLNA	540
15	CDKDGIALH	LAVRRQMEV	IKTLLSQGCF	VDYQDRRGNT	PLHVACKDGN	MPIVVALCEA	600
	NCNLDISNKY	GRTPHLAAN	NGILDVVRYL	CLMGASVEAL	TTDGKTAEDL	ARSEQHEHVA	660
	GLLARLRKDT	HRGLFIQQLR	PTQNLQPRIK	LKLFQHSQSG	KTTLVESLKC	GLLRSEFFRR	720
	RPRLSSTNSS	RFPFSPLASK	PTVSISINNL	YPCGENSVR	SREMMFBEGL	TKGMLEVFA	780
	PTHHPHCSAD	DQSTKADIDQ	NAYLNGVQDF	SVNEFSGNPV	YFCYDYFAA	NDPTSIRVVV	840
20	FSLEEFYHID	LNPIFNLISF	LKSLVPVEEP	IAPGGKLNKP	LQVVLVATHA	DIMNVPRPAG	900
	GFEGYDKDTS	LLKELRNRFQ	NDLHISNKL	VLDAGASGSK	DMKVLRNHLQ	EIESQIVSVC	960
	PMTHLCRKH	ISTLPSNRKL	NGFNQLMSLQ	QFVYDVQDQL	NPLASEEDLR	RIAQLHSTG	1020
	ELNMQSSTV	QDVLLDPRW	LCINVLGKLL	SVETPRALSH	YRGRYTVEDI	QRLVPSDSVE	1080
	ELQLTLDAMD	ICARDLSSGT	MVDVPAIKT	DNLRSHWDE	EDVMVYGGV	RIVPVEHLTP	1140
25	FPOGIFHVKV	VNLCRWLHQ	STEGDADIRL	WVNGCKLANR	GAELLVLLVN	HQQGIEVQVR	1200
	GLETEKIKCC	LLLSVSVCTI	ENVMATTLPG	LLTVKHYLEP	QQLREHHEPV	MIYQPRDFFR	1260
	AQTLKETSLT	NTMGYKESF	SSIMCPGCHD	VYSQASLGMD	IHASDLNLLT	RRKLSRLDPE	1320
	FDPLGKDWCL	LAMNLGLPDL	VAKYNTNNGA	PKDFLPSPLH	ALLREWTITP	ESTVGTLMSE	1380
	LRRLGRRDAA	DLLKASSVVF	KINLDGNGQE	AYASSCNSGT	SYNSISBVS	R	1431

Seq ID NO: C288 Protein Sequence
Protein Accession #: NP_002072.1

	1	11	21	31	41	51	
35	MELRARGWNL	LCAAAALVAC	ARGDPASKSR	SGCEVRQIYG	AKGFSLSDFP	QAEISGEHLR	60
	ICPGYITCTT	SEMEENLANR	SHAELETALR	DSSRVLQAML	ATQLRSFDDH	FQHLNDSER	120
	TLQATFPDAP	GELYTQNRAR	FROLYSELRL	YYRGANLHLE	ETLAEPWALR	LERLFKQLHP	180
	QLLLPDDYID	CLGQARALR	PFGEAPRELR	LRATRAVFAA	RSPVQGLGVA	SDVVRKVAQV	240
40	PLGPGCSRVA	MKLVCACACL	GVPGARPCPD	YCRNVKLGCL	ANQADLDAEW	RNLDSMVL	300
	TDKFWGTSV	ESVIGSVETW	LAEALNALQD	NRETLTAXVI	QGCENPKVNP	QSGPPEEKRR	360
	RGLAEPRERF	PSGTLEKLVF	EAKAQLRDVQ	DFNISLPGTL	CSEKMALETA	SDDRCWNGMA	420
	RGRYLEPVMG	DGLANQINNP	EVEVDITKPD	MTIRQQIMQL	KIMTNRLRSA	YNGNDVDFQD	480
	ASDDGSGSGS						490

Seq ID NO: C289 Protein Sequence
Protein Accession #: AAH30205.1

	1	11	21	31	41	51	
50	MIILTYLFL	LWEDTQGWGF	KDGIFPNSIW	LERAAGVYER	EARSQKYKLT	YAEAKAVCEP	60
	EGGLATYTKQ	LEAARKIGFH	VCAAGNMAGK	RVGYPIVKPG	PNCQSGKGTG	IDYGIKLNRS	120
	ERWDAYCYNP	HAKSCGGVFT	DEKQIFKSPG	FWWEYEDNQI	CYWHIRLKYG	QRIHLSPLDF	180
	DLEDDPGCLA	DYVEIYDSDY	DVHGFGVGRYC	GDELPPDDIIS	TGNVMTLKFL	SDASVTAGGF	240
55	QIKYVAMDVF	SKSSQCKNTS	TTSTONKNFL	AGRFPSHL			277

Seq ID NO: C290 Protein Sequence
Protein Accession #: NP_001973.1

	1	11	21	31	41	51	
60	MRANDALQVL	GLLFLSLARGS	EVGNSQAVCP	GTINGLSVTG	DAENQVQTLX	KLYERCEVVM	60
	GNLEIVLTGH	NADLSFLQHI	REVFGYVLVA	MNEFSTLPLP	NLRVVRGTQV	YDGKPAIFVM	120
	LNNTNNSSHA	LRLQLRLTQT	ELSGGVYIE	KNDKLCHMDT	IDWRDIVRDR	DAEIVVKDNG	180
65	RSCPPCHEVC	KGRGNGPGE	DCQTLTKTIC	APQNGHCFCG	PNEPQCCHE	CAGGCSGPD	240
	TDCFACRHFN	DGACVPRCP	QFLVYNKLT	QLEFNPHETKY	QYGGVCVASC	PENFVVDQTS	300
	CVACPPDKM	EVDEKGLKMC	EPCCGLCPKA	CEGTGSGSRF	QTVDSNIDG	FVNCIKILGN	360
	LDPLITGLNG	DFWHKIPALD	PEKLVNVRTV	REITGYLNIQ	SWPFHMFNFS	VFSNLTITIG	420
	RSLYNRGFSL	LIMKNLNVTS	LGFRSLKEIS	AGRIYISANR	QLCYHESLNN	TKVLRGPTTE	480
70	RLDIKHNRPR	RDCVASEKVC	DPLCSGGGCM	GPFGGQCLSC	RNYSRGGVCV	THCNFLNGEP	540
	REFAEAECEP	SCPHCQPMG	GTATCNGSGS	DTCAQCAEPR	DGHECVSSCP	HGVLGARGPI	600
	YKYFDVQNEC	RPCHENCTQG	CKGPELQDCL	GQTLVLIGKT	HLTMALTVIA	GLVVFHMLG	660
	GTFLYNRGRR	IQNKRAMRRY	LERGESIEPL	DPSEKANKVL	ARIFKETHLR	KLKVLGSGVF	720
	GTVHRGWVIF	EGESIKIPVC	IKVIEDKSGR	QSFQAVTDHM	LAIGSLDHAI	IVRLGLCLFG	780
75	SSLQLVTQYL	PLGSLLDHVR	QHRGALGPQL	LLNMGVQIAK	GMYYLEEHGM	VERNLAAARNV	840
	LLKSFSQVQV	ADFGVADLLP	PDDKQLLYSE	AKTPIKWMAL	ESIEHFGKYTH	QSDVWSYGVT	900
	VWELMTFGAS	PYAGLRLEAV	PDLLEKGERL	AQPQICTIDV	YVMVMKCNMI	DENIREPTFKE	960
	LANEETEMAR	DPRYLVNIKR	ESGFGIAPGP	EPHGLTNKCL	EEVLEPFLD	LDLDLEAED	1020
	NLATTTLGSA	LSGFPVGTINR	PRGSGSLSP	SSGYMPMNQ	NLGGSCQESA	VSGSSERCPR	1080
80	PVSLHMPFGP	CLASESEGH	VTGSEAZLQ	KVSMCRSSRS	SRSPPRPGDS	AYESQRHSL	1140
	TPVTPLSPFG	LEBEDVMGVV	MPDTHLKGTF	SSREGLTSSV	GLSSVLGTEE	EDEDEEYEM	1200
	NRRRRKSPFH	PPRPSLREEL	GVEYMDVQSD	LSASLGGTQS	CPLHPVIMP	TAGTTPDEDY	1260
	EYMNQRDGG	GFPGDYAAMG	ACPASSQGYE	EMRAFQGGPH	QAPHVHYARL	KTLRLSLATD	1320
	SAFDNEDYWH	SRLEFPKANAQ	RT				1342

Seq ID NO: C291 Protein Sequence
Protein Accession #: NP_001207.1

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5      1      11      21      31      41      51
      |      |      |      |      |      |
      MAPLCSPWIL PLLIPAPAPG LTVQLLLSLI LLMPVHPQRI PRMQEDSPLG GSSGDDPL 60
      GEEDLPSEED SPREDPPGE EDLPGEEDLP GEEDLPEVKP KSEEGSLKL EDLPTVEAPG 120
      DPQEPQNNAH RDKEGDDQSH WRYGGDPPWF RVSPACAGRF QSPVDIRPQL AAFCPALRPL 180
10     ELLGFQLPPL PELRLRNNGH SVQLTLFPGL EMALGPGRFY RALQLHLHWG AAGRPGSEHT 240
      VEGHRFPPEI HVVHLSTAFR RVDEALGRPG GLAVLAAPLE SGPEENSAYE QLLSRLEETA 300
      BEGSETQVFG LDISALLPSD PSRYFYQEGS LTPPCAQGV IWTVFNQTVM LSAQLHLTL 360
      DTLWGPQDSR LQMLFRATQP INGRVIEASF PAGVDSSPRA AEFVQLNSCL AAGDILALVF 420
      GLLFAVTSVA FLVQMRROHR RGTGGVSYR PAEVAETGA 459

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Seq ID NO: C292 Protein Sequence
Protein Accession #: NP_004198.1

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20     1      11      21      31      41      51
      |      |      |      |      |      |
      MGGAVVDEGP TGVKAPDGGN GMAVLFGCFV ITGFSYAFPK AVSVFFKELI QEFGIGYSDT 60
      AWISSILLAM LYGTGPLCEV CVNRFGCRPV MLVGGLEFASL GMVAASPCRS LIQVYLTTGV 120
      ITGLGLALNF QPSLIMNRY FSKRRPMANG LAAAGSPVFL CALSPLGQLL QDRYGNRGGF 180
      LILGLLLNC CVCAALMRPL VVTAQPGSGP PRFSRLLDL SVFRDRGFVL YAVAASVMVL 240
      GLFVFPVFFV SYAKDLGVED TKAAPLLTIL GFIDIFARPA AGFVAGLGKV RPYSVYLFSE 300
25     SMFPKGLADL AGSTAGDYGG LVVFCIFFGI SYGMVGALQF EVLMAIVGTH KPSAIGLVL 360
      LMEAVAVLVG EPGSGKLLDA THVMYVFIL AGAEVLTSSL ILLGNVFCI RKKPKSPQPS 420
      VAAAEKKLH KPPADSGVDL REVEHFLKAE PEKNGEVVHT PETSV 465

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Seq ID NO: C293 Protein Sequence
Protein Accession #: NP_000349.1

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30     1      11      21      31      41      51
      |      |      |      |      |      |
      MALFVRLAL ALALALGPAA TLAGPAKSPY QLVLQHSRLR GRQHGPNVCA VQKVIGTNRK 60
      YFTNCQWYQ RKICGKSTVI SYECCPGYEK VPGEKGCAPAA LPLSNLYETL GVVGSTTTQL 120
      YTDRTKLRMT EMSEGGSPFI PAPSNAWAS LPAEVLDSL VSNVTKLINA LRYHMGRRV 180
      LIDRLKHGNT LFSMYQNSNI QIEHYPNGIV TVNCARLLKA DHHATNGVVH LIDKVVITIT 240
      NNITQIIEIE DTFETLRAAV AASGLNTMLE GNGQYTLAP TNEAFKIPS ETLNRLIGDP 300
      EALRDLNHNH ILKSAACABA IVAGLSVETL EGTLEVGCSS GDMLTNGKA IISNKKILAT 360
40     NGVLYHIDEL LIPDSAKTLE ELAASDVST AIDLFRQAGL GNEHSGSERL TLLADLNSVF 420
      KDGTPPIDAK TANLERNHII KDQLASKYLY HGQTLTLGG KKLRFVYVRN SLCIENSCLIA 480
      AHDKRGYGT LFTMDRVLTQ PMGTVMVLIK GDNRFSLMVA AIQSAGLYET LNRSGVYTVF 540
      APINEAFRAL PPRERSRLIG DAKELANILK YHIGDEILVS GGIGALVRIK SLQGDCKLEVS 600
      LKNNVSVNK EFWAEDIMA TNGVVEVITN VLQPTANRPQ ERGDELADSA LEIFKQASAF 660
45     SRASQREVRIL APVYQKLLER MKH 683

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Seq ID NO: C294 Protein Sequence
Protein Accession #: NP_006527.1

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50     1      11      21      31      41      51
      |      |      |      |      |      |
      MTQRSIAGPI CNLKFVTLIV ALSESLPFLG AGVQLQNGY NGLLIAINPQ VPEHQMLISN 60
      IKEMITEASF YLBNATKREV FFRNKKILIP ATWKANNNSK IQKESYEKAN VIVTDWYGAH 120
      GDDPYTLQYR GCGKEGKYIH FTFNELLNDN LTAGYGSRRR VFVEEWAHLR WGVFDEYAMD 180
      KPFYINGQNG IKVTRCSSDI TGIYVCEKSP CPQENCIISK LFKEGCTFIY NSTQMATASI 240
      MFMQSLSSV EFCNASTHNQ EAMNLQNM C SLRSAMOVIT DSADPHHSFP MNGTELPPPP 300
      TFSLVQAGDK VVCLNLEVSS KMAEADRLQ LQQAASPYLM QIVEIHTFVG IASVDSKGEI 360
      RAQLHQINEN DDLRLVSVL PTTVBAKTDI STCSGLCKGF EVVBKLNKKA YGSVMILVTS 420
      GDDLLGNGL PTVLSSGSTI HSIALGSSAA PNLEELSLIT GGLKFFVPDI SNSNEMIDAF 480
60     SRISSGTDLI FQOHIOLEST GRNVKHHQL KNTVTVDNTV GNDTFLVTV QASGPFELIL 540
      FDPDGRKYVT NNFITNLTER TASLWIPGTA KPGHNTYTLN NTHSLQALK VVTTSRASNS 600
      AVPPATVRAF VERDSLEFPH PVMYANVQ GFYFILNATV TATVEPETGD FVTLRLDDG 660
      AGADVIMKDG IYSRYFFSFA ANGRYSILK VNHSPSISTP AHSIPGSHAM YVPGYTANG 720
      IQMNAKRSV GRNEHKKWG FSRVSSGGSF SVLGVFAGPH PDVFPPCKII DLEAVKVEE 780
65     LTLSTWAPGE DFDQSQATSY EIRMSKSLQ IQEDFNAIL VNTSKRNPPQ AGIRREIFTFS 840
      PQISTWGPEN QPNGETESH RIYVAIRAM RNSLQHAVSN LAQAPLEIPP NEDFPVARDY 900
      LILKGVLTAM GLIGIICLII VVTHRLSRK KRADKKENG T KLL 943

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Seq ID NO: C295 Protein Sequence
Protein Accession #: Bos sequence

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75     1      11      21      31      41      51
      |      |      |      |      |      |
      MKFLILLILQ ATAGALPLN SSTSLKNNV LFGERYLEKF YGLEINKLPV TKMKYSGNIM 60
      KKKIQEMQEP LQLKVTQLD TSTLEMHAP RCGVPDVHHP REMPGGFVWR KHYITYRIN 120
      YTPDMNRDQV DYAIRKAFQV WSNVTPLKFS KINTGMADIL VVFARGAGD FHFADGKGGI 180
      LAHAFPGPGSG IGGDAHFDED EFWTTHSGGT NLFLTAVHBI GHSGLGHSS DPKAVMFTY 240
      KYVDINTFRL SADDIRGIQS LYGDPKENQR LPMFDNSEPA LCDPNLSFDA VTTVGNKIFF 300
      FKDRFWLKV SERPKTSVNL ISSLNPTLPS GIEAAYEIEA RNQVFLFKDD KYWLISNLRP 360
80     ESNYKPSIHS FGFNPFVKI DAAVFNRPY RYFFVDNQY WRYDERRQNM DPGYPKLITK 420
      NFQIGIPKID AVFYSKNKY YFQGGNQFE YDFLLQRIK TLKSNWFGC 470

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Seq ID NO: C296 Protein Sequence
Protein Accession #: Bos sequence

1 11 21 31 41 51
 5 MKPILLILLQ ATASGALPLN SSTLEKNNV LFGERYLEKF YGLEINKLPV TKMKYSGNLM 60
 KEKIQEMQHF LGLKVTGQLD TSTLEMMHAP RCGVPDVHHP REMPGGPVWR KGYITYRINN 120
 YTPDMNREDV DYAIRKAPQV HSNVTPLKFS KINTGMADIL VVFARGAGGD FFAFDGKGGI 180
 LAHAFGPGSG IGGDAHFDED BFWTHSGGT NLFLTAVHAI GHSLGLGESS DPKAVMPPTY 240
 KYVDINTFRL SADDIRGIQS LYGDPKENQR LPNPDNSEPA LCDPNLSFDA VTTVGNKIFF 300
 PKDRFFWLKV SERPKTSVNL ISSLWPTLPS GIEAAYRIZA RNQVFLFKDD KYMLISNLRP 360
 10 SPNYPKSIHS FGFPNFKKI DAAVENPRFY RTYFFVDNQY WRYDERRQMM DPGYPKLITK 420
 NFQIGIGKID AVFYSGNKY YFFQGSNQFE YDFLLQIRITK TLKSNSWFGC 470

Seq ID NO: C297 Protein Sequence
 Protein Accession #: NP_008883.1

1 11 21 31 41 51
 15 MAKDNSTVRC FQGLLIFGNV IIGCCGIALT AECIPFVSDQ HSLYPLLEAT DNDDIYGAAN 60
 IGIFVGLCLF CLSVLGIYGI MKSSRKILA YFILMFIVYA FEVASCITAA TQRDFFTNML 120
 20 FLKQMLERYQ NNSPPNDDQ WQNGVTKTW DRLMLQDNCC GVMGPDWQK YTSAPRTENN 180
 DADYPWPRQC CVNNNLKEPL NLEACKLGVP GFYHNQGCYE LISGPMNRHA WGVAWFGFAI 240
 LCWTFWLLG TMFYNSRIEY 260

Seq ID NO: C298 Protein Sequence
 Protein Accession #: NP_001784.2

1 11 21 31 41 51
 30 MGLPRGFLAS LLLLQVCWLQ CAASEPCRAV FREAEVTLEA GGAEQEPGQA LGKVFMCQCPG 60
 QEPALFSTDN DDFTVRNGET VQERRSLKER NPLKIPFSKR ILRRKRWDW VAPISVPENG 120
 KBPFPQRLNQ LKSNKDRDTK IFYSITGPGA DSGPEGVFAV EKETGWLLEN KPLDREELAK 180
 YELFGHAYSE NGASVEDPMN ISIIVTDQND HKPKFTQDTF RGSVLGVLV GTSVMQVTAT 240
 DEDDAIYTYN GVVAYSIHSQ EPKDPEDLMF TIHRSTGTIS VISSGLDREK VPFTLTITQA 300
 35 TDMDGSGSTT TAVAVVEILD ANDNAEMFDP QKYEARVPEM AVGHEVQRLT VTDLDAFESP 360
 AWRATYLMG GDDGDHFTIT THPESNQIIL TTRKGLDPEA KNQHTLYVEV TNEAPFVLKL 420
 PTSTATIVVH VEDVNEAPVF VPFSKVVEVQ BGIPTGEFVC VYTAEDDEKE NOKISYRIIR 480
 DPAGWLAMPD DSGQVTAAGT LDREDEQFVR NNIYEVNULA MDNGSPETTG TGTLLTLID 540
 VNDEGPVPEP RQITICNQSP VRQVLNITDK DLSPTISPFQ AQLTDEDIY WTAEVNNEGD 600
 40 TVVLGKKEFL KQDTYDVHLS LSDHGKKEQL TVIRATVCDG HGHVETCEPG WKGGFLLPVL 660
 GAVLALLFLL LVLLLLVRKK RKIKFPLLE EDDTRDVFY YGEGGGGEED QDYDITQLHR 720
 GLEARFEVVL RNDVAPTII TPMYRPRPAN PDEIGNFIE NLKAANTDPT APFYDTLLWF 780
 DYEGSGSDAA SLSSLTSSAS DQDQDYDYLN SWGSRFKKLA DMYGGEED 829

Seq ID NO: C299 Protein Sequence
 Protein Accession #: NP_005620.1

1 11 21 31 41 51
 50 MAKSAENGI YSVSGDEKKQ FLIAPGEDGA PAKGDGPVGL GTPGGRLAVP PRETWTRQMD 60
 FIMSCVGFV GLGNVWRFPY LCKYNGGQVP LIPYVLIALV KGPIPIFLBI SLGQPMKAGS 120
 INWNICPLIF KGLGYASMI VFYCNTYYIM VLAAGFYTLV KSPITTLFWA TCQHTWMTPD 180
 CVELFEEDC ANASLANLTC DQLADRESFV ISFWENKVLK LSGGLEVEGA LNWVTLCLL 240
 ACWLVYPCV WKGVKSTGKI VYFATATFPY VLVVLLVRGV LIPGALDGII YLKPFDWSKL 300
 55 GSPQVWIDQ TQIFPSYAIQ LGALTALGSY NRENNNCYKD AILALINSQ TSFPAFVVF 360
 SILGFMAAEQ GVHISKVAES GPGLAFIAYP RAVTLMFVAP LWAALFFPML LLLGLDSQFV 420
 GVBSFITGLL DILPASYYFR FQREISVALC CALCFVIDLS MVTGGMYVF QLFDYYSASG 480
 TTLWQAFWE CVVAVVYGA DRFMDDIACM IGYRCPWMK WCNSEFTPLV CMGFIIFNVV 540
 YYEPLVYNT YVYFWGSRAM GWAFALSSML CVFLHLLGCL LRAGTMAER NQHLTQPTWG 600
 60 LHLHLETRAQD ADVRLTLT PVSSESKVVV VESVM 635

Seq ID NO: C300 Protein Sequence
 Protein Accession #: NP_006507.1

1 11 21 31 41 51
 65 MEPSSKLLTG RLMLAVGGAV LGSLOPGYNT GVINAPOKVI EEFYNQTVWH KYGESILPTT 60
 LTLWLSVA IFSVGGMIGS FSVGLFVNRX GRENSMLMN LIAFVSAVIM GFSKLKGFPE 120
 MLILGFEIIG VYCGLTGTFV PMYVGEVSPT AFRGALGTLH QLGIVVGILI AQVGLDSIM 180
 70 GNDLWPLLL SIIPFALLQ CIVLEPCFES PRFLINRNE ENRAKSVLEK LGTADVTE 240
 LQEMKESRQ MREKKVITL ELFRSPAYRQ PILAVVILQ SQQLSGINAV FYYSTSIFEK 300
 AGVQPVYAT IGSQIVNTAF TVVSLFVVER AGRRTBLIG LAGMABCAIL MTIALALLEQ 360
 LPNMTLSIV AIFGFVAFB VGPQPIWFI VAKLFSQGPR PAIAVAGFS NWTGNFIVGM 420
 CFQVVEQLCG FVYFIIFTVL LVLFIFTYF KVPETRGRTF DEIASGFRQG GASQSDKTFE 480
 75 ELFHPLGADB QV 492

Seq ID NO: C301 Protein Sequence
 Protein Accession #: XP_035292.2

1 11 21 31 41 51
 80 MAGAGPKRRA LAPAAEKEE EAREKMLAAK SADGSAFAGE GEGVTLQRNI TLLNGVAIIV 60
 GTIIGSGIFV TPTGVLEKAG SPGLALVVNA ACGVFSIVGA LCYAEIGTTI SKSGEDYAYM 120
 LEVYGSLEAF LKWLIELLI RPSSQYIVAL VFATYLLKPL PFTCPVPEEA AKLVACLVL 180
 LLTAVNCYBV KAATRVQDAF AAKLLALAL IILLGFVQIG KGVSNLDEF FSEFGTKLV 240

GNIVLALYSQ LFAYGQWNYL NFVTEEMINP YRNLPALIII SLPIVTLVYV LTNLAYFTTL 300
 STEQMLSSSA VAVDFQNYHL GVMWILIPVF VGLSCFGSVN GSLFTSSRLF FVGSREGELP 360
 SILSMIHQL LTPVPELVFT CVMTLLYAFS KDIFSVINFF SFFNWLCAVAL AIGMIWLKH 420
 RKPLERPIK VNLALPVFFI LACLFLIAVS FWKTEVECGI GFTIILSGLP VYFFGVWVKN 480
 KPKNLLQGIF STTVLCQKLM QVVPQET 507

Seq ID NO: C302 Protein Sequence
 Protein Accession #: NP_005259.1

1 11 21 31 41 51
 | | | | |
 MNWSIFEGLL SGVKNYSTAF GRIWLSLVFI FRVLVYLVA ERVMSDDDKD FDCNTRQPGC 60
 SNVCFDEFFP VSHVRLWALQ LILVTCPSLL VVMVAYREV QEKRRREANG ENSGRLYLNP 120
 GKKGGLMWT YVCSLVFKAS VDIAPLYVFH SFYPKYILPP VVKCHADFCP NIVDCFISKF 180
 SEKNIFTLEF VATAAICILL NLVELIYLVS KRCHCLAAK KAAQAMCTGHH PHGTTSSCKQ 240
 DDLSSGDLIF LGSDSHPPLL PDRPRDEVKK TIL 273

Seq ID NO: C303 Protein Sequence
 Protein Accession #: NP_005121.1

1 11 21 31 41 51
 | | | | |
 MKICSLTLLS FLLLAQVLL VEGKKVKVNG LHSKVSEQK DTLGNTQIKQ KSRPGNKGKF 60
 VTKDQANCRW AATQEEGIG LKVECTQLDH EFSCVFAGNP TSCLKLKDER VYWKQVARNL 120
 RSQKDCIYYS KTAVKTVCR KDFPSSSLKL VGSTLEGNK PRKEKTEMSP RBHIKQKETT 180
 PSSLAVTQTM ATKAPCEVED PDMAQRKTA LEFCGETWSS LCTFFLSIVQ DTSC 234

Seq ID NO: C304 Protein Sequence
 Protein Accession #: AAH22542

1 11 21 31 41 51
 | | | | |
 MCSEILLRQE VLKDGFRDL LIRVKPGESI EDLHTCRLLI KQDIPAGLYV DPELASLRE 60
 RNITEAVMVS ENFDIEAPNY LSKESVLIY AREDSQCIDC FQAFLPVHCR YHRPHSEDEG 120
 ASIVVNNPDL LMFCDQAGSR RMIRFRFDSF DKTIEFPIK CWAHSEVAAP CALENEDICQ 180
 WNMCKYKSVY KNVILQVPVG LTVHTSLVCS VTLLITILCS KKKKK 225

Seq ID NO: C305 Protein Sequence
 Protein Accession #: NP_004985.1

1 11 21 31 41 51
 | | | | |
 MSLWQLVLV LVLGCCFAA PRQRQSTLVL FPGDLRTNLT DRQLAEYLY RYGYTRVARM 60
 RGESKSLGPA LLLQKQSL PETGELDSAT LKAMRTPCG VEDLGRFQTF EGDLMHHEN 120
 IYWIQNYSE DLPRAVDDA FARAPALWSA VTPLTFRVY SEDADIVIQF GVAEHDGQYP 180
 FDGKGLLAH AFPPGPGIQG DAHEDDDELW SLGKGVVVPT RFGNADGAAC HFFPIFGRS 240
 YSACTIDGRS DGLFWCSTTA NYDTDDRFGF CPERLYTRD GNADGKPCQF PFIQGGQSYS 300
 ACTTDGRSDG YRWCATANY DRDLKFGFCP TRADSTVMGG NSAGELCVFP FTPLGKEYST 360
 CTSEGRGDNF LKCATSTNFD SDKMGFCFD QGYSPLVAA BEFGHALCLD HSSVPEALMY 420
 PMXRTFEGFP LHKDDVNGIR HLYGPRPEPE PRPPTTTTPQ PTAPTVCPT GPPTVHEPSE 480
 PTAGTGFPS AGPTGPFPTAG PSTATTVPLS FVDDACNVNI PDIAIEIGNQ LYLEKDGKYW 540
 RFSEGRGSRP QQPFLIADKW PALPRKLDSE FEEPLSKLF FESGRQVWVY TGASVLGPRR 600
 LDKLGLGADV AQVIGALRSR RGMMLFSGR RLNRFDVKAQ MVDPRSASEV DRMEFGVFLD 660
 THDVPYREK AYFCQDRFYW RVSSRSEINQ VDQVGYVTD ILQCPED 707

Seq ID NO: C306 Protein Sequence
 Protein Accession #: NP_000204

1 11 21 31 41 51
 | | | | |
 MAGPRPSPWA RELLAAALISV SLSGTLANRC KKAPVKSCYE CVRVKDCY CIDEFRDRR 60
 CNTQAEALLA GCQRESIVVM ESSFQIYEST QIDTTLRRSQ MSPQSLRVRL RPEERHFEL 120
 EVFEPLSPV DLYILMDFSN SMSDDLNLK KMGQNLARVL SGLTSDYTIG FGKVDKVSF 180
 PQIDMRPEKL KEFWNSDEP FSPKNVISLT EDVDEFENKL QGERISGNLD APEGGFDAIL 240
 QTAVCTEDIG WRFDSTLLV PSTESAFHYE ADGANVLAI MERNRCHL DTGTYTQYR 300
 TQDYPSVPTL VRLAKHNI PIFAVTNYSY SYEKLITYE FVSSLGVLQE DSSNIVELLE 360
 BAPNRIRSNL DIRALDSPRG LRTEVTSKMF QKTRTGSFHI RRGVGIYQV QLRALHVDG 420
 THVCQLPEDQ KGNHLKPSF SDGLEMDAGI ICDVCTCLQ KSVRSARCSF NGDFVCGQCV 480
 CSBGWSGQTC NCSTGSLSDI QPCLEGEDEK PCSGRGECQC GHCVCYGBGR YEGQFCEYDN 540
 FQCFTSGFL CNDRGRCSMG QCVCEPGWTG FSCDCPLSWA TCIDSNNGIC NRGHCCEGR 600
 CHCEQSLNT DTICETINYS AHPGLCEDLR SCVQCAWGT GEKKKGTCEE CNFKVMVDE 660
 LKRAEEVVVR CSFREDDED TSYXTMEKDG APGPNSTVLV HKKKDCPPGS FWWLIPLLL 720
 LPLALLLL LCKYCACCK ACLALPLCCN RGHMVGFKED HYMLRENMA SDHLDTPMLR 780
 SGNLKGDDV RWKVTNNMQR PGFATHAASI NPTSLVPYGL SLRLARLCTE NLLKPDTRC 840
 AQLRQVEEN LNEVYRQISG VHKLQQTFR QQPNAKQKD HTIVDTVLA PRSAKPAALK 900
 LTBKQVEQRA FHDLVAPGY YTLADQDAR GMVEFQEGVE LVDVRVPLFI RPEDDEKQL 960
 LVEAIDVPA TATLGRRLVM ITIYKQARD VVSFQPEFS VSSGQVARI PVIREVLDDG 1020
 KSQVSXRTQD GTAQGNRDYI FVEGELLQFP GEAWKELQVK LLEIQEVDNL LRGRQVRRFH 1080
 VQLSNPKFGA HLQPHSTTI IIRDPDELDR SFTSQMLSSQ PPHGDLGAP QNPNAKAAGS 1140
 RKIHFNLP SSKPMGYRVK YWIGDSESE AHLSDSKVPS VELTNLYPYC DYEMKVCAG 1200
 AQSGPYSSL VSCRTGVEVP SEPGLAFNV VBSTVTQLSW AEPATNGEI TAYEVCYGLV 1260
 NDDMRPIGPM KKVLDNPKN RMLLHNLRE SQPYRYTVKA RAGACWGPFR BAINLATOP 1320
 KRPMSPILIP DIPIDVAQSG EDYDSFLMYS DDVLRSPSGS QRPVSDDTG CGWKFEPLLG 1380
 EELDLRRVTW RLFPFELIPRL SASSGRS6DA EAPTAPRTTA ARAGRAAAVF RSATGPPGE 1440

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HLVNGRMDFA	FFGSGNSLHR	MTTTSAAAYG	THLSPEVPHR	VLSTSSLTIR	DYNSLTRSEH	1500
SESTTLPRDY	STLTSVSSH	SRLTAGVPT	PTRLVFSALG	PTSLRVSWQ	PRCERPLQGY	1560
SVVEYQLNGG	ELHRLNINP	ACTGVVVEDL	LPNHSYVFRV	RAQSQEGWGR	EREGVITTES	1620
QVEPQSPCLCP	LEFGAFTLST	PSAPGFLVFT	ALSPDSLQLS	WERPRRPNGD	IVGYLVTCM	1680
AQGGGPATAF	RVDGDSPEER	LTVPGLSENV	PYKFKVQART	TEGFGPEREG	IITTESQDGG	1740
PFQQLSSRAG	LFQPLQSEY	SSITTTTSTA	TRFPLVDGLT	LGAQHLEAGG	SLTRHVTQEF	1800
VSRTLTSTGT	LSITMDQQFF	QT				1822

Seq ID NO: C307 Protein Sequence
Protein Accession #: NP_076404.1

1
11
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MGENLTLAKL	PNNELEHQES	RNSGNRSDGP	GKNITLLENEF	DTIVLEVLVL	IIFVASILLN	60
GLAVWIFFHI	RNKTSFIFYL	KNIVVADLIM	TLTFPPFRIVH	DAGFGPWYFK	FILCRYTSVL	120
PTANMYTSIV	FLGLISIDRY	LKVVKPPGDS	RMYSITFTKV	LSVCVWVIMA	VLSLPNIILT	180
NQOPTEDNIH	DCKSLKSLG	VKNHTAVTVV	NSCLFVAVLV	ILIGCYIAIS	RYLHKSRRQP	240
ISQSSERKRH	NQSIRVVAV	PFTCFLEPYHL	CRIPFTFSBL	DRLLDESAQK	ILYYCKEITL	300
FLSACNVCLD	PIIYFFMCRS	FSRRLFKKGN	IRTRBSISRS	LQSVRRSEVR	IYYDYTTV	358

Seq ID NO: C308 Protein Sequence
Protein Accession #: NP_065840.1

25
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1	11	21	31	41	51	
MVNCLESLAVL	SLVISQGAGD	RGKFEVVSVV	GRAEESVVLG	CDLLPPAGRP	PLHVIEWLRF	60
GFLLPIFIQF	GLYSFRIDED	YVGRVRLQXG	ASLQIEGLRV	EDQGWYECRV	FFLDQHIFED	120
DFANGSWVHL	TVNSPPQQQE	TPPAVLEVOE	LEPVTILRCVA	RGSPLPHVIV	KLRGKDLQGG	180
QQQVQVQNGT	LRIRRVERGS	SGVYTCQASS	TEGSATHATQ	LLVLGPPVIV	VPPKNSTVNA	240
SQDVSLACHA	EAYPANLYTS	NFQDNINVEH	ISRLQPRVQI	LVDGSLRLLA	TQDDAGCYT	300
CVPSNGLLHP	PSASAYLTVL	CMGVIKCPV	RANPPLLFSV	WTKDGKALQL	DKFFGWSQGT	360
EGSLIILALGN	EDALGEYSCT	PYNSLGTAGP	SPVTRVLLKA	PPAFIERPKE	EYFQEVGREL	420
LIPCSAQGGP	PPVVSMTKVG	RGLQQAQVD	SNSSILRLPL	TKRAGHWEC	SASWAVARVA	480
TSINVVVLGT	SPHVTVNVS	VALPKGANVS	WEPGFDGGYL	QRFSVWYTPL	AKRFDREHHD	540
WVSLAVPVGA	AHLLVPGLQP	HTQYQFSVLA	QNKLGSGPFS	EIVLSAFEGE	PTTPAAEGLE	600
PTEIPFPLSP	PRGLVAVRTP	RGVLLHWDP	ELVPRKLDGY	VLEGRQGSQ	WEVLDPVAVG	660
TTELLVPLGL	LKDVLYBFL	VAFAGSFVSD	PSKTNVSTS	GLEVPSTRTQ	LGGLLPQFVL	720
AGVVGVCFL	GVAIVLSLLA	GCLNRRRAA	RRRRKRLRQD	PPLIFSPITGK	SAAPSALGSG	780
SPDSVAKLKL	QOSFVPSIRQ	SLLMGDPAGT	PSFHPDPPSS	RGPLPLEPIC	RGPDGRFVMG	840
PTVAAPQERS	GREQAEPRTP	AQRLARSFDC	SSSSPSGAPQ	PLCTIEDISPV	APPPAAPPSF	900
LPFGPGLLYQ	LSLPPFFRMN	VDGWPFLSE	PSRAAFEDYM	DTTRCPTSSF	LRSPETFPVS	960
PRESLPGAVV	GAGATAEPFY	TALADWTLRE	RLLEGLLPAA	PRGSLTSQSS	GRGSASFRLP	1020
PSTAPAGGS	YLSAPAGDTS	SWAGSGPERWP	RREEVTVTSK	RRNTSVDEWY	ENDSEFPDGM	1080
KLEETLHLGL	ASSRLRPEAE	TELGVKTPSE	GCLLNTAHVT	GPEARCAALR	EEFLAFRRRR	1140
DATRRLPAY	RQPVFHPQA	TLG				1163

Seq ID NO: C309 Protein Sequence
Protein Accession #: NP_065840.1

50
55
60

1	11	21	31	41	51	
MLTKPLQGGP	APPGITPTPP	GKDRKAEFA	EYRLGPILOG	GGFGIVFAGH	RLTDRLQVAI	60
KVIPRNRVLG	WSPLSDSVTC	PLEVALLMKV	GACGGHPGVI	RLLDWFETQE	GFMLVLRLPL	120
PAQDLFDYIT	EGKPLGEGPS	RCFFGQVVA	IQHCHSRGVV	HRDINDENIL	IDLRGCAKL	180
IDFGSCALLH	DEPYTDVGT	RVYSPPEWIS	RHQYHALPAT	VNSLGILLYD	MVCGDLPFER	240
DQKILEAEHL	PPAHVSPDCC	ALIRERCLAPK	PSSRPSELEH	LLDPWMQTPA	EDVTPQFLQR	300
RPCPFLGLVA	TLSLAWFGLA	PNGQKSHFMA	MSQG			334

Seq ID NO: C310 Protein Sequence
Protein Accession #: NP_062501.1

65
70
75

1	11	21	31	41	51	
MECLYYFLGF	LLLAARLPLD	AAKRFHVLG	NERPSAYMRE	ENQLNGWSSD	ENDNNEKLYP	60
VNRKGRDMRK	NSWKGGRVQA	VLTSDSPALV	GSNITFAVNL	IFPRQKEDA	NGMIVYEKNC	120
RNEAGLSADE	YVYNWTAWSE	DSGNGTGTQ	SHENVFEDGK	PPFHPQWRR	WNFIYVFTL	180
GQYFQKLGRC	SVRVSVNTAN	VTLGQPLMEV	TVYRRHGRAY	VPIAQVKDVI	VVTDQIPFV	240
TMFQKDRNS	SDETFLKDL	IMFDVLHDP	SHFLNYSTIN	YKWSFGDNTG	LFVSTNHTVN	300
HTVVLNGTFS	LNLTVKAAP	GPCPPPPPPP	RPSKFTPSLG	PAGONPLELS	RIPDENQIN	360
RYGHFQATIT	IVEGILEVNI	IQMTDVLMFV	PPFESSLIDF	VVTCQSEIPT	EVCTIISDPT	420
CEITQNTVCS	PVDVDEMCLL	TVRRTFNGSG	TYCVNLTLGD	DTSLALTSTL	ISVPDRDPAS	480
PLRMANSLI	SVGCLALFVT	VISLLVYKX	KEYNPISNGP	QNVVRSKGLS	VFLERAKAVT	540
FPQNQKDLPL	LKNQEFKGV					560

Seq ID NO: C311 Protein Sequence
Protein Accession #: Eos seq

80

1	11	21	31	41	51	
NRILKRLPLAC	IQLLCVCRID	WANGYYRQOR	KLVERIGWSY	TGALNQKRWG	KKYPTCNSPK	60
QSPINDIEDL	TQVNVNKKL	KPQGMKTSI	ENFIENTGK	TVEINLINDY	KVSGGVSEMV	120
FKASKITTFW	GKCNSSDGS	EHSLBQKFP	LEMQIYCFDA	DRFSSFRERAV	KKGKLRALS	180
ILFEVGTSEN	LDFKAIIDGV	ESVSRFGKQA	ALDPFILLNL	LENSTDKXYI	YNGSLTSPPC	240
TDIVDWIVPK	DIVSISESQL	AVFCSVLTMQ	QSGYVLMMDY	LQNNFREQQY	KFSRQVFSY	300

5	TGKEIEHEAV	CSESEPVQQA	DPENYTSLLV	TWERPRVVYD	TMIEKFAVLV	QQLDGEDQTK	360
	HEFLTIDGYQ	LGAILNNLPL	NMSVYVLQVA	ICINGLYGKY	SDQLIVDMPT	DNPELDLFFE	420
	LIGTEIEIKE	EEEGKDIEEG	AIVNPERDSA	TNQIRKKEPE	ISTTTHYNRL	GKTYNEAKTN	480
	RSPTRSGEFS	LNQSGTAEBS	NSTSQPVTKL	ATEKDISLTS	QTVTELEPHG	VEPVSASLND	540
10	GSKTVLRSPH	MNLSGTSBEL	NVTSITIEYE	ESLTSRFLD	TGAEDESGGS	PATSAIPLPI	600
	ENISQGVYFS	SENPEITITD	VLIPEASARNA	SEOSTSGGSE	ESLKQPSMBG	NWYFSSSTDI	660
	TAQDFVGSGR	ESFLQITWYE	IRVDESEKRT	KSFSGAGEVMS	HQSRYFTDLEM	PHYTFYAFYP	720
	TEVTPHAFPT	SSRQQDLVST	INVVYSQTIT	PVYNBASNMS	HESEIGLAGE	LESEKKAIVP	780
15	LVTVASLTFI	CLVVLVGLII	YHRKQCPTAE	FLYEDSTSPR	VITPPTPIPT	PISDQVGAIP	840
	IKHFPKHVAD	LHASSGFTBE	FEEVQSGTAV	PGITADSSNE	FDNKKHKNRY	NIIVADEHSK	900
	KLQAQLAEGQ	KLTDYIYANV	VDGVNRPKAP	IAAQGFLPKST	AEDFWRMIEV	HNVEVIVMTI	960
	NLVEKGRKKC	DQYVWADGSE	EYGNFLVTVQ	SVQVLAITYT	RNVFLRNTKI	KKGSQKGRPS	1020
20	GRVVTQYHYT	QWPDGVPSE	SLPVLTFVRK	AAYAKRHAVG	FPVVHCSAGV	GRGTGYTIVD	1080
	SMIQQLIQSG	TVNI FPLEKH	IRSQNTYLVQ	TEQYVAVTHD	TNVEALILSE	TEVLDSHTHA	1140
	YVWALLQPHG	AGKTKLEQFQ	QLLSQNTYQL	SDBYSAALKV	NRESKNTSSI	IFEVSRSVGI	1200
	SSLSGEGTIV	INASYITMGY	QSNFPIITQH	PLLETIKDFW	RMWIDENAZL	VVMIPDGMQ	1260
	AEDFSVYWFN	KDEPIMCSEP	KVTLMAEERK	CLSNEEKLLD	QDFILRATQI	VDVLEVRHQP	1320
	CPKWFNPDSP	ISKTFELISV	IKESAANRDH	PMIVDEHGGV	VTAGTFCALT	TLMHQLEKEN	1380
	SDVYVQVAKM	INLMRPGVFA	DTEQYQFLYK	VILSLVSTRQ	RENPTSTLDS	NGAALLPDGNI	1440
	AESLSLV						1440

Seq ID NO: C312 Protein Sequence
Protein Accession #: XP_031379

25	1	11	21	31	41	51	
	MRILERFLAC	IQLLCVCRID	WANGYYRQOR	KLVEBIGWSY	TGALNQKNWG	KKYPTCNSPK	60
	QSPINIDEDL	TQVNVNLKGL	KFGQWDKTSL	ENTPIHNTKG	DREINILNDY	RVSGGVSEMV	120
30	FKASKITTFH	GKCNMSSDGS	EHELSQCKFP	LEMQYICFDA	TVESEFEAV	KGKGKLRALS	180
	ILFVGVTEEN	LDPKALIDGV	ESVSRFGKQA	ALMDFLILNL	LPNSTDXYIY	YNGELTSPCC	240
	TDVTDVTFVK	DTVSISESOL	AVFCEVLTMQ	QSGQVLMYLD	LOMNFREQQY	KQSPQVFSY	300
	TOKEIKVHEK	CSESEFENQA	DPENVTSLIV	TNERPRVVYD	TMIKEFAVLV	KFLDGEOQTK	360
	HEFLITDGYQ	LGAILNLMLP	NMSYVLQVSA	ICTNGLYGKY	SDQLIVDMPT	DNPELDLFFE	420
35	LIGTESIIKE	EBEKGDLIEG	ALVNPGRDGA	TNQIRKRPGR	ISTTTEYWRJ	GTYKNYKATN	480
	RSPTRGSEFS	GKGQDVMTSL	NSTSQVPTKL	ATEKDISLTS	QTVELTPPST	VEGSTGASIND	540
	GSKTVLRSPH	MNLSGTAESL	NTVSTTEYKE	ESLLTSFKLD	TQVTESSGSS	PATSAPLFFIS	600
	ENISQGYIYS	SENPETITTYD	VLIPESSARNA	SEDSTSSGSS	ESLKDPSMGS	NWFFPSSTDI	660
	QAPDQVGGSR	ESFLQNTNYE	IRVDESEKTT	KFGSAGPVMS	QGPSTVDMFL	PHYSTFATFPY	720
40	TEVTPHAPT	SSRQQLDVST	VWVYVSTQTO	PVYNGETPLQ	PBSYSSVFFL	VPFLLLDQIKI	780
	ILTPVAAEBS	DSALHATFVF	PSVDVSFSES	LSBYDGAPLL	PFSSASFSSE	FRPHLHTVSYQ	840
	LNQVTSATE	SOKVPLHNAS	PVAGGOLLLE	PSLAQYSIVL	STHAASETSL	EPFGSSGVLY	900
	KTLMFQSQVE	PSSDAMMHAR	SGGPEPSYAL	SDNEGSGRIF	TVSYSSAIPV	HDSVGVITYQG	960
	SLFSGSPSHI	LPKSSLITPT	ASLQKTHAIL	SGDGEMWSAG	DSDEFLELDT	MDGTALNTSS	1020
45	PYSVAEFTYT	TPVPEODNKA	LEKSKETIYN	ETELQIPBSN	ZMVPSPBSTV	MZMVMNVNKM	1080
	KNALQJTESV	SISSTKGMFP	GGSLATHTTKV	FDHEISQVPE	MNPFVQPTRT	VQSQASQSLT	1140
	LPVLSANSEK	ASDDPASSEM	LPSPQQLLPE	STASFSFEST	LLFSPQSQAD	VDTLTKVTLF	1200
	AVPDEPILVE	TPKVDKISST	MLHLIVSNGA	SEENMLGSTS	VPVFTDVSTPS	HMBASLQGL	1260
	TFYASKEYE	PVLKSSBSST	QVVPISLYSD	ELFQTNALET	NQAHFPPGKRH	VFATPVLISD	1320
50	KEPLANTIKAL	IHSDEILSTL	KSVSTKQVFA	GIPTVASDTF	VSDTHSPVIG	NGHVAITAVS	1380
	PHRDQSVTST	KLKPSKATS	KLGHSKASDA	GLVGGGEDGD	TDDGDGDDDD	DROGSELSTH	1440
	KCMSCSSYRE	SQRKVMNDS	FNHSLMDQNP	NFISYSLSEN	SEEDNRVTSV	SDSQSGTMDR	1500
	SPGKSGSSTV	LSQKHNDDKE	ENDIQGTSSAL	LPBSPESKAN	AVLTSDEESQ	SOQGTSDSLN	1560
	ENKETSDFSF	ADTNKNDGSE	ILAAAGSETI	POFPQSPTSS	VTGSENSVEH	VKRAEASNS	1620
55	HBRSJGLAEG	LESDKKVAIP	LIVLVSALTFI	CIJVLVNGILI	YWRKCPQTAH	FVLEOSTSPR	1680
	VISTPPTPIF	PISDDVGAAT	IKHFPKAEVJ	LHASSGFFTE	FETLKEFYQE	VQBSTVDLGI	1740
	TDSSNRPDNP	KHKRYNTIV	AYDHSRVKLA	QLAERDGLIT	DYINANYVDG	YNRPKAYITAA	1800
	QGPLKSTADE	FWRMILWENV	EVJVMITSLV	EKKRKRCDQY	WPADGSESYQ	NFLVTCQSKAY	1860
	VLAYITVBRF	TLRNKEIKKG	SNRNXKNGRV	VTQYHYTQNV	DMGVPSYSLP	VILFVVRKAAV	1920
60	AKRHAAGTVV	VECSAGKERT	GTVIIVLDSML	QQIQBEGTVN	IFGLFKILRS	QRNYLVQSTY	1980
	QYVFHTDPLV	ZAILSKAGTE	LDSHIHDHYN	ALLIPRGPAC	TLKREKQFLL	SGNIIQQSDY	2040
	SAALKQCNRE	KNRTSSIIFF	ERBSVGOISS	SGEGTDYINA	SYIINGYYQSN	EFIITQBPLL	2100
	HTIKDFWAMI	WDRNAQLVVM	IPDGQKQVMS	EBFYWPNKDE	PINCSFSKVT	LMAREHCKLS	2160
	NEEKLITQDE	ALATQTDVYV	LEVHRHQPCK	WENPDSPIK	TFELISVUIE	EAANRDGPMT	2220
65	VHDERGOTVA	GTFCALITLV	HQLEKENSVD	VYQVAKMNLH	MRPGVFADIE	QYQFLYKVL	2280
	SLVSTROZEN	PSTSLDSNGA	ALPDGSLAES	LSBLV			2340

Seq ID NO: C313 Protein Sequence
Protein Accession #: NP_002842

70	1	11	21	31	41	51	
	MRILKRFLAC	IQLLCVCRLD	WANGYYRQQR	KLVEEIGWSY	TGALNQKNWG	KKYPTCNSPK	60
	QSPINIDEDL	TQVNVNLKKL	KFGQWKTSL	ENTFLBNTGK	TVEINLNDY	RVSGGVSEMV	120
	FKASKITHEH	GKCNMSDDG	ESLEGRQKFA	LEWQIYCPDA	DRFSSFERAV	KKGKCLKRLS	180
75	ILFEVGTSEN	LDPKAITDGV	ESVSRFGKQA	ALDDPFLML	LENSTDKYI	YNGSLTSPPC	240
	TDTVDVHFA	TDTSISESLA	AVFCEVLTMQ	QGGVWMLDY	LQNNREQQY	KFSRQVSSY	300
	TQKESEIHVA	CSSEPSNVQA	DPENYTSLLV	TWPRPVVD	TMIEKFAVLY	QGLDQGEQTK	360
	HEFLIDGYQD	LGAILNLLPL	NMSYVLQIVA	ICTNGLYEPI	SDQLLVDMPT	LDNPDLDFPE	420
	LIGTEILKE	EEBKGQIEB	AIYNPGRDSA	TNQIRKEKPY	ISTTHYNI	GTKYNEAKTN	480
80	RSPTAGSEFS	KGQDVNTSL	NVNSQPVTKL	ATEKDISLTS	QIVTELPHPT	VBGTSASLND	540
	GSKTVLRSFH	MNLSTQAEEL	NTVISITEEY	BSLLTSFKLD	TGAEDSSSGE	PATSAIPFIS	600
	ENISQGYIFS	SENPEITDYE	VLFPESARNA	SEDSSTSGSE	ESLKDPSMRG	NWVFPSTDIS	660
	TAGPVDGSGR	ESFPQDITYE	IRVDESEKTT	KSPSAGPVMS	QGPSVTDLEL	PHYSTPAYFP	720
	TSVTHVHPT	SSROQNTVST	VNVVYSKOT	PVYNAPASIS	SHESRIGLAE	GLSEKKAVYI	780

PLVIVSALTPL ICLVLVLGIL IYWRKCFQTA HFYLEDSTSP RVISTPPTPI FPISDDVGAI 840
 PIKHPFKHVA DLHASSGFTE EFETLKEFYQ EVQSCVDLGL ITADSSNHPD NKHKRYINI 900
 VAYDSRVLKLA QLAEKDGKLT TDYINANYVD GYNRPKAYIA AQGLKSTAE DFWRMIWENH 960
 VEIVMITNL VEGRRKCDQ YPADGSEY GNFVLTQKSV QVLAYTYVRN FTLRNTKIKK 1020
 GSQGRPSGR VVTQYHYTQW PDMGVPEYSL PVLTFVRKAA YAKRHAVGFV VVHCAGVGR 1080
 TGTIVLDSM LQQIQHSGTV NIFGFLKHIR SQRYLVQTE EQYVFIHDTL VEAILSKETE 1140
 VLDSHIAHYV NALLIPGPAG KTKLEKQFQL LSQSNIQQSD YSAALKQCNR EKNRTSSIIIP 1200
 VERSRVGIS LSGEGTDYIN ASYIMGYQS NEFIITQHPL LHTIKDFWRM IWDHNAQLVV 1260
 MIPDQGNMAE DEPVYVWPKD EPINCESFKV TLMAEHKKCL SNEEKLIQD FILEATQDDY 1320
 VLEVRHFQCP KWPNDSPIS KTFELISVIK EEAANRDGPM IVHDEHGGVT AGTFCALTTL 1380
 MHQLEKENS DVYQVAKMIN LMRPGVPADI EQYQFLYKVI LSLVSTRQEE NPSTSLDSNG 1440
 AALPDGNIAR SLESIV 1456

Seq ID NO: C314 Protein Sequence
 Protein Accession #: Bos sequence

1 11 21 31 41 51
 MRILKRFAC IQLLCVCRLD WANGYYRQQR KLVEBIGWSY TGAALNQKNWG KKYPTCNSPK 60
 QSPINIDEDL TQVNVNKKL KPQGWDKTSL ENTFIHNTGK TVEINLTNDY RVSGGVSEMV 120
 MFKASKITF HWKCNMSSD GSEHSLGQK PPLEMGIYCF DADRFSFEE AVKGGKLRAL 180
 LSLFEVGT EMLDFKAIID GVESVRFGK QALDPFILL NLLPNSTDKY YINGSLTSP 240
 PCTDTWIVF KOTVSISSSQ LAVFCEVLTQ QSGYVLMMD YLQNNFREQQ YKFSRQVFS 300
 YTGKEETHEA VCSSEPVNQ ADPENYTSLL VTWERPRVYV DTMIEKFAVL YQQLDGEDQT 360
 KHEELTDGYQ DLGAILNLL PMSYVLQIV AICINGLYGK YSDQLIVDMT DNPFLDLFP 420
 ELIGTEELIK EEEGKIDIE GAIVNPGRDS ATNQIRKKEP QISTTHYMR IGTYNEAKT 480
 NRSPTGSEF SKGQDVPTNS NSTSQPVTK LATEKDLSLT SQVTLELPPH VEGTSASIN 540
 DGSKTVLRSF HMLSGTAKS LNTVSIITEY EESLTSFKL DTGAEDSSGS SPATSAIPFI 600
 SENISQGYIF SSENPTITY DVLIPEARM ASEDSTSGS EESLKDPSME CNVWFSST 660
 ITAQPDVGSQ RESFLQNTYT EIRVDESEKT TKSPSAGFVM SQGFSVTDL EPHYSTPAYF 720
 PTEVTPHAPT PSRQQLDVS TVNVYSQIT QFVNEASNS SHESRIGLAE GLESEKKAIV 780
 PLVIVSALTPL ICLVLVLGIL IYWRKCFQTA HFYLEDSTSP RVISTPPTPI FPISDDVGAI 840
 PIKHPFKHVA DLHASSGFTE EFETLKEFYQ EVQSCVDLGL ITADSSNHPD NKHKRYINI 900
 VAYDSRVLKLA QLAEKDGKLT TDYINANYVD GYNRPKAYIA AQGLKSTAE DFWRMIWENH 960
 VEIVMITNL VEGRRKCDQ YPADGSEY GNFVLTQKSV QVLAYTYVRN FTLRNTKIKK 1020
 GSQGRPSGR VVTQYHYTQW PDMGVPEYSL PVLTFVRKAA YAKRHAVGFV VVHCAGVGR 1080
 TGTIVLDSM LQQIQHSGTV NIFGFLKHIR SQRYLVQTE EQYVFIHDTL VEAILSKETE 1140
 VLDSHIAHYV NALLIPGPAG KTKLEKQFQL LSQSNIQQSD YSAALKQCNR EKNRTSSIIIP 1200
 VERSRVGIS LSGEGTDYIN ASYIMGYQS NEFIITQHPL LHTIKDFWRM IWDHNAQLVV 1260
 MIPDQGNMAE DEPVYVWPKD EPINCESFKV TLMAEHKKCL SNEEKLIQD FILEATQDDY 1320
 VLEVRHFQCP KWPNDSPIS KTFELISVIK EEAANRDGPM IVHDEHGGVT AGTFCALTTL 1380
 MHQLEKENS DVYQVAKMIN LMRPGVPADI EQYQFLYKVI LSLVSTRQEE NPSTSLDSNG 1440
 AALPDGNIAR SLESIV 1456

Seq ID NO: C315 Protein Sequence
 Protein Accession #: Bos sequence

1 11 21 31 41 51
 MRILKRFAC IQLLCVCRLD WANGYYRQQR KLVEBIGWSY TGAALNQKNWG KKYPTCNSPK 60
 QSPINIDEDL TQVNVNKKL KPQGWDKTSL ENTFIHNTGK TVEINLTNDY RVSGGVSEMV 120
 FKASKITFHW GKCNMSSDGS EHSLEGQKFP LEMGIYCFDA DRFSSFEAV KGGKLRALS 180
 ILFEVGTEN LDFKAIIDGV BSVSRFGKQA ALDPFILLNL LPNSTDKYI YINGSLTSPPC 240
 TDTVDWIVFK DTVSISBSQ AVFCEVLTQ QSGYVLMMD YLQNNFREQQ YKFSRQVFS 300
 TGKEETHEAV CSSSEPVQA DPENYTSLLV THERPRVYD TMIKFAVLY YQQLDGEDQTK 360
 HSEFLTDGYQ LGAILNLLP NMSYVLQIVA ICTINGLYGK YSDQLIVDMPT DNPFLDLFP 420
 LIGTEELIKE EEEGKIDIE GAIVNPGRDS ATNQIRKKEP QISTTHYMR IGTYNEAKT 480
 RSPTGSEFS GKGQDVPTNS NSTSQPVTK LATEKDLSLT SQVTLELPPH VEGTSASIN 540
 GSKTVLRSEF HMLSGTAKS LNTVSIITEY EESLTSFKL DTGAEDSSGS SPATSAIPFI 600
 ENISQGYIFS SSENPTITY DVLIPEARM ASEDSTSGS EESLKDPSME CNVWFSST 660
 TAQPDVGSQ RESFLQNTYT EIRVDESEKT TKSPSAGFVM SQGFSVTDL EPHYSTPAYF 720
 TSVTPHAPT PSRQQLDVS TVNVYSQIT QFVNEASNS SHESRIGLAE GLESEKKAIV 780
 PLVIVSALTPL ICLVLVLGIL IYWRKCFQTA HFYLEDSTSP RVISTPPTPI FPISDDVGAI 840
 PIKHPFKHVA DLHASSGFTE EFETLKEFYQ EVQSCVDLGL ITADSSNHPD NKHKRYINI 900
 VAYDSRVLKLA QLAEKDGKLT TDYINANYVD GYNRPKAYIA AQGLKSTAE DFWRMIWENH 960
 VEIVMITNL VEGRRKCDQ YPADGSEY GNFVLTQKSV QVLAYTYVRN FTLRNTKIKK 1020
 GSQGRPSGR VVTQYHYTQW PDMGVPEYSL PVLTFVRKAA YAKRHAVGFV VVHCAGVGR 1080
 TGTIVLDSM LQQIQHSGTV NIFGFLKHIR SQRYLVQTE EQYVFIHDTL VEAILSKETE 1140
 VLDSHIAHYV NALLIPGPAG KTKLEKQFQL LSQSNIQQSD YSAALKQCNR EKNRTSSIIIP 1200
 VERSRVGIS LSGEGTDYIN ASYIMGYQS NEFIITQHPL LHTIKDFWRM IWDHNAQLVV 1260
 MIPDQGNMAE DEPVYVWPKD EPINCESFKV TLMAEHKKCL SNEEKLIQD FILEATQDDY 1320
 VLEVRHFQCP KWPNDSPIS KTFELISVIK EEAANRDGPM IVHDEHGGVT AGTFCALTTL 1380
 MHQLEKENS DVYQVAKMIN LMRPGVPADI EQYQFLYKVI LSLVSTRQEE NPSTSLDSNG 1440
 AALPDGNIAR SLESIV 1456

Seq ID NO: C316 Protein Sequence
 Protein Accession #: Bos sequence

1 11 21 31 41 51
 MRILKRFAC IQLLCVCRLD WANGYYRQQR KLVEBIGWSY TGAALNQKNWG KKYPTCNSPK 60
 QSPINIDEDL TQVNVNKKL KPQGWDKTSL ENTFIHNTGK TVEINLTNDY RVSGGVSEMV 120
 FKASKITFHW GKCNMSSDGS EHSLEGQKFP LEMGIYCFDA DRFSSFEAV KGGKLRALS 180
 ILFEVGTEN LDFKAIIDGV BSVSRFGKQA ALDPFILLNL LPNSTDKYI YINGSLTSPPC 240

TDTVDWIVFK DTVSISESQL AVFCEVLTMQ QSGYVLMMDY LQNNFREQQY KFSRQVFSSY 300
 TGKEEIHBAV CSESEPENVQA DPENYISLLV TWERPRVVDY TMIEKFAVLY QQLDGEDQTK 360
 HEFLTDGYQD LGAILNNLLP NMSYVLQIVA ICTNGLYGKY SDQLIVDMPT DNPEASNSSE 420
 ESRIGLAEGE ESKKAVIPL VIVSALTFC LVVLVGILLY WRKCFQTAHF YLEDSTSPRV 480
 5 ISTPTPTPIF ISDDVGAIP I KHFPKHVADL HASSGFTTEF ETLKEFYQEV QSCTVDLGI 540
 ADSSNHFDNK HKKNRYINIV YDSRVKLAQ LAEKDGKLT YINANYVDGY NRPKAYIAAQ 600
 GPLKSTAEDE WRMIWEHNVE VIVMITNLVE KGRRKCDQYW PADGSEYGN FLVTQKSVQV 660
 LAYYTVRNFT LRNTKIKKGS QKGRPSGRVY TQYHYTQWPD MGVPFYSLPV LTFVRKAAYA 720
 KRHAUGPVVV HCSAGVGRG TYIVLDSMLQ QIQHSGTVNI PGFLKHRSQ RNYLVQTEBQ 780
 10 YVFIHDTLVE AILSKETEVL DSHIHAYVNA LLIPGPAGKT KLEKQFQLLS QSNIQQSDYS 840
 AALKQCNRK NRSSSIIPVE RSRVGISLS GEGTDYINAS YIMGYYSNE FIITQHPLH 900
 TIKDFWRMIW DENAQLVVM I PDGQMAEDE FVYWFNKDEP INCESPKVTL MAEHHKCLSN 960
 ESKLIQDFI LEATQDDYVL EVRHFCQPKW ENPDSPIKST FELISVIKSE AANRDGPMIV 1020
 HDEHGGVTAG TFCALITLMI QLEKENSVDV YQVAKMINLM RGVFADIEQ YQFLYKVLIS 1080
 15 LVSTRQSENP STSLDENGAA LPDGNIAESL ESL 1140

Seq ID NO: C317 Protein Sequence
 Protein Accession #: Eos sequence

20 1 11 21 31 41 51
 | | | | | |
 MRILKRFLAC IQLLCVCRID WANGYYRQQR KLVEEIGWSY TGALEQKNGG KKYPTCNSPK 60
 QSPINIDEDL TQVNVNKKKL KFGQNDKTSI ENTFIHNTGK TVEINLNDY RVSGGVSEMV 120
 FKASKITHEW GKCNMSDGS EHSLEGQKFP LEMQIYCFDA DRPSSFEBAV KKGKLRALS 180
 25 ILFEVGTREN LDFKAIIDGV ESVSRRFGQA ALDPFILLML LFNSTDKYYI YNGSLTSPPC 240
 TDTVDWIVFK DTVSISESQL AVFCEVLTMQ QSGYVLMMDY LQNNFREQQY KFSRQVFSSY 300
 TGKEEIHBAV CSESEPENVQA DPENYISLLV TWERPRVVDY TMIEKFAVLY QQLDGEDQTK 360
 HEFLTDGYQD LGAILNNLLP NMSYVLQIVA ICTNGLYGKY SDQLIVDMPT DNPELDLFFE 420
 LIGTEELIKE ESEKDIIEG AIVNPGRDSA TNQIRKKEPQ ISTTTHYNI GTKYNEAKTN 480
 30 RSPTRGSEFS GKGDVENTSL NTSQPVTKL ATEKDLSLTS QTVTELPHPT VEGTSASLND 540
 GSKTVLRSFH MNLGGTAESL NTVSITTEYE ESLLTSEKLD TGAEDSSGSS PATSAIPFIS 600
 ENISQGYIFS SENPETITVD VLIPESARNA SEDSTSSGSE ESKLDPSMEG NVWFPSSDI 660
 TAQPDVGSGR ESFLQINYTE IRVDESEKTT KSFSAGPVMS QGSPVTDLEM PHYSTFAYFP 720
 TEVTPHAFIP SSRQDLVST VNVVYSQITQ PVYNEASNS HESRIGLABG LESEKKAIVP 780
 35 LVIVSALTFI CLVVLVGILI YWRKCFQTAH FYLEDSTSPR VISTPTPTIF PISDDVGAIP 840
 IKHFPKHVAD LHASSGFTTE FETLKEFYQE VQSCVTLGI TADSSNHFDN HKKNRYINIV 900
 AYDHSRVKLA QLAEKDGKLT DYINANYVDG YNRPKAYIAA QGPLKSTAE FWRMIWEHN 960
 EVIVMITNLV ERGRRKCDQY NPADGSEYGN NPLVTQKSVQ VLAYYTVRNFT LRNTKIKKGS 1020
 40 SQKGRPSGRV VTQYHYTQWP DMGVPEYSLP VLTFRKAAY AKRHAUGPVV VHCSAGVGR 1080
 GTYIVLDSML QIQHSGTVNI IFGFLKHRS QRNYLVQTEE QYVFIHDTLV EAILSKETEVL 1140
 LDSHILHAYN ALLIPGPAGK TKLEKQFQGL TSLFRLECRG TISAHCNLPL PGLTDPPTSA 1200
 SRVARTILS QSNIQQSDYS AALKQCNRK NRSSSIIPVE RSRVGISLS GEGTDYINAS 1260
 YIMGYYSNE FIITQHPLH TIKDFWRMIW DENAQLVVM I PDGQMAEDE FVYWFNKDEP 1320
 45 INCESPKVTL MAEHHKCLSN ESKLIQDFI LEATQDDYVL EVRHFCQPKW ENPDSPIKST 1380
 FELISVIKSE AANRDGPMIV HDEHGGVTAG TFCALITLMI QLEKENSVDV YQVAKMINLM 1440
 RGVFADIEQ YQFLYKVLIS LVSTRQSENP STSLDENGAA LPDGNIAESL ESL 1493

Seq ID NO: C318 Protein Sequence
 Protein Accession #: Eos sequence

50 1 11 21 31 41 51
 | | | | | |
 MRILKRFLAC IQLLCVCRID WANGYYRQQR KLVEEIGWSY TGALEQKNGG KKYPTCNSPK 60
 QSPINIDEDL TQVNVNKKKL KFGQNDKTSI ENTFIHNTGK TVEINLNDY RVSGGVSEMV 120
 FKASKITHEW GKCNMSDGS EHSLEGQKFP LEMQIYCFDA DRPSSFEBAV KKGKLRALS 180
 55 ILFEVGTREN LDFKAIIDGV ESVSRRFGQA ALDPFILLML LFNSTDKYYI YNGSLTSPPC 240
 TDTVDWIVFK DTVSISESQL AVFCEVLTMQ QSGYVLMMDY LQNNFREQQY KFSRQVFSSY 300
 TGKEEIHBAV CSESEPENVQA DPENYISLLV TWERPRVVDY TMIEKFAVLY QQLDGEDQTK 360
 HEFLTDGYQD LGAILNNLLP NMSYVLQIVA ICTNGLYGKY SDQLIVDMPT DNPELDLFFE 420
 LIGTEELIKE ESEKDIIEG AIVNPGRDSA TNQIRKKEPQ ISTTTHYNI GTKYNEAKTN 480
 60 RSPTRGSEFS GKGDVENTSL NTSQPVTKL ATEKDLSLTS QTVTELPHPT VEGTSASLND 540
 GSKTVLRSFH MNLGGTAESL NTVSITTEYE ESLLTSEKLD TGAEDSSGSS PATSAIPFIS 600
 ENISQGYIFS SENPETITVD VLIPESARNA SEDSTSSGSE ESKLDPSMEG NVWFPSSDI 660
 TAQPDVGSGR ESFLQINYTE IRVDESEKTT KSFSAGPVMS QGSPVTDLEM PHYSTFAYFP 720
 65 TEVTPHAFIP SSRQDLVST VNVVYSQITQ PVYNEASNS HESRIGLABG LESEKKAIVP 780
 LVIVSALTFI CLVVLVGILI YWRKCFQTAH FYLEDSTSPR VISTPTPTIF PISDDVGAIP 840
 IKHFPKHVAD LHASSGFTTE FETLKEFYQE VQSCVTLGI TADSSNHFDN HKKNRYINIV 900
 AYDHSRVKLA QLAEKDGKLT DYINANYVDG YNRPKAYIAA QGPLKSTAE FWRMIWEHN 960
 70 EVIVMITNLV ERGRRKCDQY NPADGSEYGN NPLVTQKSVQ VLAYYTVRNFT LRNTKIKKGS 1020
 SQKGRPSGRV VTQYHYTQWP DMGVPEYSLP VLTFRKAAY AKRHAUGPVV VHCSAGVGR 1080
 GTYIVLDSML QIQHSGTVNI IFGFLKHRS QRNYLVQTEE QYVFIHDTLV EAILSKETEVL 1140
 LDSHILHAYN ALLIPGPAGK TKLEKQFQGL QSNIQQSDY SAALKQCNRK NRSSSIIPV 1200
 ERSRVGISLS GEGTDYINAS YIMGYYSNE FIITQHPLH TIKDFWRMIW DENAQLVVM 1260
 75 IPDQNMARE FVYWFNKDEP INCESPKVTL MAEHHKCLSN ESKLIQDFI LEATQAWRS 1320
 DGRNPLCSDN PYAPTRKRPK RGCLPGSQDD QSDARSIC 1359

Seq ID NO: C319 Protein Sequence
 Protein Accession #: XP_002914.4

80 1 11 21 31 41 51
 | | | | | |
 MKDIDIGKEY IIPSPGYRSV RERTSTSGTH RDREDSKFRP TRPLECQDAL ETAAARAGLS 60
 LDASMSQLR ILDEEHPGKG YHGLSALKP IRTTSKHQHP VDNAGLFSCM TFSWLSLAR 120
 VAHKKGEISM EDVMSLSKGE SSDVNCRLLE RLWQEBLNEV GPDAASLRV VVIFCKTRLI 180

LSVLCMLITQ LAGFSGPAFM VKHLEYTQA TESNLQYSL LVLGLLLTEI VRSWSLALTW 240
 ALNYRTGVRL RGAILTWAFK KILKLNKIKE KSLGELINIC SNGQRMFEA AAVGSLLAGG 300
 PVVAILGMIY NVIILGPTGF LGSAYFILFY PAMMFASRLT AYFRKCVAA TDERVQKME 360
 VLTIIKFIKM YAWVKAFSQS VQKIREEERR ILEKAGYFQS ITVGVAPIVV VIASVVTFSV 420
 HMTLGFDLTA AQAFVTVTVF NSMTFALKVT PFSVKSLSEA SVAVDRFKSL FLMESEVHM 480
 NKPASPHIKI EMKNATLAWD SHSSIQNSP KLTPEMKKDK RASRGKKEKV RQLQRTHEQA 540
 VLAEQKQHLL LDSDERPSPE EEEGKHILHG HRLQRTLHS IDLEIQEKKL VGICGSVSGS 600
 KTSLSAILLG QMTLEGGIA IGTTFAYVAQ QAWILNATLR DNILFGKEYD EERYNSVLNS 660
 CCLRPDLAIL PSSDLTEIGE RGNLSSGQR QRISLARALY SDRSTYILDD PLSALDAHV 720
 NHIFNSAIRK HLKSKTVLFV THQLQYLWDC DEVIFMKEGC ITERGTHEEL MNLNGDYATI 780
 FNNLLIGETP FVEINSGKET SGSQKKSQDK GPKTGSVKKE KAVKPEEGQL VQLEEKQGS 840
 VPSVYGVYI QAAGGFLAFL VIMALFMLNV GSTAFSTWWL SYWIKQSGGN TTVTRONETS 900
 VSDSMKDNPH MQYYASIAL SMAMVILKA IRGVVVFVKGT LRASSRLHDE LFRILRSPM 960
 KFFDTTPTGR ILNRFSDMD EVDVRLFPQA EMFIQNVILV FFCVGMIAGV PPWFVAVGP 1020
 LVILFSLVLI VSRVLIRELK RLDNITQSPF LSHITSSIQG LATIHAYNKG QEFILHRYQEL 1080
 LDDNQAFPLF FTCAMRLAV RDLISIALI TTTGLMIVLM HGQIPFAYAG LAISYAVOLT 1140
 GLPQFTVRLA SETEARFTSV ERINHYIKIL SLEAPARIKN KAPSPDWQPE GEVTFENAEM 1200
 RYRENLPVLV KKVSPFIKPK EKIGIVGRTG SGKSSLGML FRLVLSGGC IKIDGVRI 1260
 IGLADLRSL SIIPQEPVLF SGTVRNLDP FNQYTEDQIW DALERTHMKC CIAQLPLKLE 1320
 SEVMENGDNF SVGERQLLCI ARALLRHCKI LILDEATAAM DTETDLIQE TIREAFADCT 1380
 MLTIAHRLHT VLGSORIMVL AQGQVVEFDT PSVLLSNDSS RYAMFAAAE NKVAVKG 1437

Seq ID NO: C320 Protein Sequence
 Protein Accession #: NP_005679.1

1 11 21 31 41 51
 MKDIDICKEY IIPSPGYRSV RERTSTSGTH RDREDSKPRR TRPLECQDAL ETAARABGLS 60
 LDASMSHQLR ILDEHPKPKG YHGLSALKP IRTFSKHQEP VDNAGLFSCM TFSWLSLAR 120
 VAHKKGELSM EDVWLSKHE SSVNCRRLS RLWQBELNEV GEDASLRRV VWIFCTRILI 180
 LSVLCMLITQ LAGFSGPAFM VKHLEYTQA TESNLQYSL LVLGLLLTEI VRSWSLALTW 240
 ALNYRTGVRL RGAILTWAFK KILKLNKIKE KSLGELINIC SNGQRMFEA AAVGSLLAGG 300
 PVVAILGMIY NVIILGPTGF LGSAYFILFY PAMMFASRLT AYFRKCVAA TDERVQKME 360
 VLTIIKFIKM YAWVKAFSQS VQKIREEERR ILEKAGYFQS ITVGVAPIVV VIASVVTFSV 420
 HMTLGFDLTA AQAFVTVTVF NSMTFALKVT PFSVKSLSEA SVAVDRFKSL FLMESEVHM 480
 NKPASPHIKI EMKNATLAWD SHSSIQNSP KLTPEMKKDK RASRGKKEKV RQLQRTHEQA 540
 VLAEQKQHLL LDSDERPSPE EEEGKHILHG HRLQRTLHS IDLEIQEKKL VGICGSVSGS 600
 KTSLSAILLG QMTLEGGIA IGTTFAYVAQ QAWILNATLR DNILFGKEYD EERYNSVLNS 660
 CCLRPDLAIL PSSDLTEIGE RGNLSSGQR QRISLARALY SDRSTYILDD PLSALDAHV 720
 NHIFNSAIRK HLKSKTVLFV THQLQYLWDC DEVIFMKEGC ITERGTHEEL MNLNGDYATI 780
 FNNLLIGETP FVEINSGKET SGSQKKSQDK GPKTGSVKKE KAVKPEEGQL VQLEEKQGS 840
 VPSVYGVYI QAAGGFLAFL VIMALFMLNV GSTAFSTWWL SYWIKQSGGN TTVTRONETS 900
 VSDSMKDNPH MQYYASIAL SMAMVILKA IRGVVVFVKGT LRASSRLHDE LFRILRSPM 960
 KFFDTTPTGR ILNRFSDMD EVDVRLFPQA EMFIQNVILV FFCVGMIAGV PPWFVAVGP 1020
 LVILFSLVLI VSRVLIRELK RLDNITQSPF LSHITSSIQG LATIHAYNKG QEFILHRYQEL 1080
 LDDNQAFPLF FTCAMRLAV RDLISIALI TTTGLMIVLM HGQIPFAYAG LAISYAVOLT 1140
 GLPQFTVRLA SETEARFTSV ERINHYIKIL SLEAPARIKN KAPSPDWQPE GEVTFENAEM 1200
 RYRENLPVLV KKVSPFIKPK EKIGIVGRTG SGKSSLGML FRLVLSGGC IKIDGVRI 1260
 IGLADLRSL SIIPQEPVLF SGTVRNLDP FNQYTEDQIW DALERTHMKC CIAQLPLKLE 1320
 SEVMENGDNF SVGERQLLCI ARALLRHCKI LILDEATAAM DTETDLIQE TIREAFADCT 1380
 MLTIAHRLHT VLGSORIMVL AQGQVVEFDT PSVLLSNDSS RYAMFAAAE NKVAVKG 1437

Seq ID NO: C321 Protein Sequence
 Protein Accession #: NP_005553.1

1 11 21 31 41 51
 MPALWLGCC LPSLLLPAA RATSREVCDC NGKSRQCIFD RELHRQTGNG FRCINCNNDNT 60
 DGIECECKCN GFYRREERDR CLPCNCSKG SLSARCONSG RCSCKPGVTG ARCDRCPLPG 120
 HMLTDAGCTQ DQRLDLSKCD COPAGIAGPC DAGRCVCKPA VTGERCDRCR SGYYNLDG 180
 BEGCTQCECY GHSASCRSSA EYSVKITST FHQVDVGWKA VQRNGSPARK QMSQRBDQVF 240
 SSAQRLEDEVY FVAPAKFLGN QQVSYQSL SFDYRVDRCGR HPSAHDVILE GAGLRITAPL 300
 MPLGKTLPCG LTKITYYFRLN EHPNNWSEF LSYFSEYRLL RNLTLALIRA TYGEYSTGYI 360
 DNVTLISARP VSGAPAEVVE QCICPVGYKG QPCQDCASGY KRDSARLGPF GTCIPCNCQG 420
 GGACDPDTGD CYSGDENEDI ECADCPIGFY NDPEDPRSCK PCFCHNGFSC SVMPESEVV 480
 CNNCPFGVTG ARCELADG FGDFFGEHGP VRPCQPCQCN NVVDPASAGN CDRLTGRCLK 540
 CIHNTAGIYC DQCKAGYFGD PLAPNEADKC RACNCPM3S EFWVCRSDGT CVCKPGFGGP 600
 NCEHGAFSCP ACYNQVLIQM DQFMQQLQRM ZALISKAQGG DGVVPDTELE GRMQQABQAL 660
 QDILDAQIS EGASRSLGLQ LAKVRSQENS YQSRIDDLKM TVERVHALGS QYQNRVDRTH 720
 RLITQMQLSL AESSESLGNT NIPASOHYVG FNGFKSLAQE ATRLARSHVS SASNMQLTR 780
 ETEDYSKQAL SLVKALHEG VSGSGSGPDG AVVQGLVEKL ETKSLAQQL TREATQABIE 840
 ADRSYQHSIR LLDVSRLQG VSDQSPQVEE AKRIKQADS LSTLVTRHMD BFKRTQKNLG 900
 NWKEAQQLL QNGSGREKS DQLLERANTA KSRQAQALSM GNATFYEVES ILKNLREFDL 960
 QVDNRKAEAB BAKMKLEYIS QKVSHASDKT QQAERALGSA AADAQRAKNG AGEALHISSE 1020
 IEBIGISLNL EANTADGAL AMEKGLASLK SEMREVEGEL ERKELEFDTN MDAVQMVITE 1080
 AQKVDTAKN AGVTIQDTLN TLDGLLHMD QPLSVDEBGL VLEQLKLEA KTQINSQLRP 1140
 MMSELEKRA RQRGHLHLE TSIDGILADV KNLENIRNDL PPGCYNTQAL EQQ 1193

Seq ID NO: C322 Protein Sequence
 Protein Accession #: NP_066924.1

1 11 21 31 41 51
 MANACLQLLG FILAFIAGWIG AIUSTALPQW RIYSYAGDNI VTAQAMYEG LWM6CV8QSTG 60

QIQCKVFDSL LNLSSLTQAT RALMVVGILL GVIAIFVATV GMKCMKCLSD DEVQKMRMAV 120
 IGGAIPLLAG LAILVATAMY GNRIVQEFYD PMTPVNARYE FGQALFTGWA AASLCLLGGA 180
 LLCSCSPKRT TSYPTPRFPY KPASSSGKDY V 211

5 Seq ID NO: C323 Protein Sequence
 Protein Accession #: AAM77876

10 1 11 21 31 41 51
 MSSWIRWHEP AMARLWGFCW LVVGFWRAAF ACPTSCCKCSA SRINCSDPSP GIVAFPRLEP 60
 NSVDPENITE IFIANQKRLI IINEDDVEAY VGLRNLTIYD SGLKPVAKKA FLKNSNLQHI 120
 NPTRNKLTSL SRKHFRHLDL SELILVGNPF TCSCDIMWIK TLQEAQSSPD TQDLYCLNES 180
 SKNIPLANLQ IPNCGLPAN LAAPNLTVEE GKSIITLSCSV AGDPVPMNYW DVGNIIVSKHM 240
 15 NETSETQGS LITNISSDDG GKQISCVAEN LVGEDQDSVN LTVHFAPTIT FLESPTSDEH 300
 WCIPFTVKGK PKPALQWFYN GAILNESKYI CTKIHTVNH T EYRGCLQLDN PTHMNGDYT 360
 LIAKNEYGKD EKQISAHPMG WPGIDDGANP NYPDVIYEDY GTAANDIGDT TNRSNEIPST 420
 DVTDKTGREH LSVYAVVVIA SVVGFCLLVM LFLKLARHS KFGMKGPVLF HKIPLDG 477

20 Seq ID NO: C324 Protein Sequence
 Protein Accession #: NP_006171.1

25 1 11 21 31 41 51
 MSSWIRWHEP AMARLWGFCW LVVGFWRAAF ACPTSCCKCSA SRINCSDPSP GIVAFPRLEP 60
 NSVDPENITE IFIANQKRLI IINEDDVEAY VGLRNLTIYD SGLKPVAKKA FLKNSNLQHI 120
 NPTRNKLTSL SRKHFRHLDL SELILVGNPF TCSCDIMWIK TLQEAQSSPD TQDLYCLNES 180
 SKNIPLANLQ IPNCGLPAN LAAPNLTVEE GKSIITLSCSV AGDPVPMNYW DVGNIIVSKHM 240
 30 NETSETQGS LITNISSDDG GKQISCVAEN LVGEDQDSVN LTVHFAPTIT FLESPTSDEH 300
 WCIPFTVKGK PKPALQWFYN GAILNESKYI CTKIHTVNH T EYRGCLQLDN PTHMNGDYT 360
 LIAKNEYGKD EKQISAHPMG WPGIDDGANP NYPDVIYEDY GTAANDIGDT TNRSNEIPST 420
 DVTDKTGREH LSVYAVVVIA SVVGFCLLVM LFLKLARHS KFGMKGPASV ISNDDASAP 480
 LHHISNGSNT PSSSBSGSDA VIIGMTKIPV IENPQYPGIT NSQLEPDTFV QHIKRNIVL 540
 35 KRELGEAGFQ KVFIAECYNL CPEQDKILVA VKTLKDASN ARKDFHREAS LLTNLQHEHI 600
 VKFYGUCVBS DPLIMVPEYM KHGDLNKFEL ABGPDAVIMA EGNPPTLTQ SQMLHIAQOI 660
 AAGMVYLAQ HFVHDLATR NCLVGENLLV KIGDFGMSRD VYSTDYRVKG GHTMLPIRM 720
 PFESIMYRKE TTESDVVSLG VVLNEIFTYG KQFWYQLSN EVIECTIQR VLQRPRTCPQ 780
 EYVELMLGCV QREPMRKNI KGIRTLQLNL AKASPVYLDI LG 822

40 Seq ID NO: C325 Protein Sequence
 Protein Accession #: Bos sequence

45 1 11 21 31 41 51
 MSSWIRWHEP AMARLWGFCW LVVGFWRAAF ACPTSCCKCSA SRINCSDPSP GIVAFPRLEP 60
 NSVDPENITE IFIANQKRLI IINEDDVEAY VGLRNLTIYD SGLKPVAKKA FLKNSNLQHI 120
 NPTRNKLTSL SRKHFRHLDL SELILVGNPF TCSCDIMWIK TLQEAQSSPD TQDLYCLNES 180
 SKNIPLANLQ IPNCGLPAN LAAPNLTVEE GKSIITLSCSV AGDPVPMNYW DVGNIIVSKHM 240
 50 NETSETQGS LITNISSDDG GKQISCVAEN LVGEDQDSVN LTVHFAPTIT FLESPTSDEH 300
 WCIPFTVKGK PKPALQWFYN GAILNESKYI CTKIHTVNH T EYRGCLQLDN PTHMNGDYT 360
 LIAKNEYGKD EKQISAHPMG WPGIDDGANP NYPDVIYEDY GTAANDIGDT TNRSNEIPST 420
 DVTDKTGREH LSVYAVVVIA SVVGFCLLVM LFLKLARHS KFGMKGPVLF HKIPLDG 477

55 Seq ID NO: C326 Protein Sequence
 Protein Accession #: NP_570843.1

60 1 11 21 31 41 51
 MFLKHYLLLL VGQAMGAGL AYHGCPSECT CSRASQVECT GARIVAVPTP LPMWAMSLQI 60
 LINTHTLENE SPFLNISALI ALRIENNELS RITPGAFNRL GSLRYLSLAN NKLQVPIGL 120
 FQGLDSESL LLSNQLLQI QPAHFSQCSN LKELQLHGNH LSYIPDGAFO HLVLGLTKML 180
 GKNSLTHISP KVPCHLANTQ VLRLVENRLT DIPMGTFDGL VNLQELALQO NQIGLLSPGL 240
 FHRNHLQRI YLSNHHISQL PPSIFWQLPQ LNRLLFLGNS LKELSLGIFG PMENLRELNL 300
 YDNHISLED NVFSNLRQLQ VLILERNQIS FISPGAFNGL TELNELSLHT NALQDLQGV 360
 65 FRMLANLQNI SLQNNRLQQL PGNIPANVNG LMAIQLQNNQ LENLFLGIFD HLGLCELR 420
 YENPNCDSO ILPLRNWLL NQPRLGTDIV PVCFSANVR GQSLIINVM VAVPSVHVPE 480
 VPSYPETPWY PDTPSYDIT SVSSTTELTS PVEDYIDLTT IQVTDRESVW GMTQAQSGLA 540
 IAAIVIGIVA LACSIACVGV CCCCCKRSQA VLMQKAPNE C 581

70 Seq ID NO: C327 Protein Sequence
 Protein Accession #: NP_002649.1

75 1 11 21 31 41 51
 MRALLARLLL CVLVVSDSKG SNELHQVPSN CDCLNGGTCV SNKYFENIHW CNCPKPGGGQ 60
 HCEIDKSKTC YEGNGHFYRG KASTDTMGPR CLPWNBSATVL QQTYBAHRSO ALQLGLGKH 120
 YCRNEMRRR PCTVQVGLK PLVQECMVHD CADGKPSSP PBEIKFOCGQ KTLRPRFKII 180
 GGEFTTIEMQ PWFPAIYRRH RGGSVTYVCG GSLISPCNVI SATHCIFDYP KRREDYIVYLG 240
 RSRINNTIQG EMKFEVENLI LKQYASDTL AHNIDIALK IRSKEGRCAQ PSRTIYITCL 300
 80 PSMYNDPQFG TSCEITGPGK ENSTDYLYPE QLEMTVVKLI SHRECQPHY YGSEVTFRML 360
 CADDPQWKTQ SCQGDSSGGL VCSLOGRMTL TGIVSWGRGC ALKDKPGVYT EVSEHFLFWIR 420
 SHTKRENGLA L 431

Seq ID NO: C328 Protein Sequence
 Protein Accession #: XP_087254.1

1 11 21 31 41 51
 5 MQFRECSING MKYOEINGRL VPEGPTPDSS EGNLSYLSSL SHLNNLSHLT TSSSPRTSFE 60
 NETELIKEHD LFFKAVSLCH TVQISNVQTD CTGDGPWQSN LAPSOLEYYA SSPDEKALVE 120
 AAARIGIVFI GNSSETMEVK TLGKLERYKL LHILEFSDSR RRMSVIVQAP SGEKLLFAKG 180
 AESSILPKCI GGETEKTRI H VDEPALKGLR TLCAIYRKFT SKEYEBIDKR IFEARTALQQ 240
 REEKLAAPVQ FIEKDLILLG ATAVEDRLQD KVRRTIEALR MAGIKVNVLT GDRRETAVSV 300
 10 SLSCGHFHRT MNILELINOK SDSECAEQLR QLARRITEOH VIOHGLVVDG TSLSLALREH 360
 EKLMEVCRN CSAVLCCRMA FLQKAKVIRL IKISEKPTIT LAVGDGANDV SMIOEAHVGT 420
 GIMGEBGRQA ARNSDYAIAR FKFLSKLLFV HGHFYIIRIA TLVQYFFYKN VCFITPQFLY 480
 QFYCLFSQQT LYDSVYLTLY NICFTSLPII TYSLLBQEV D PHVLQNKPTL YRDISKNRLL 540
 SIKTFLYTTI LGFSHAPIFF FGSYLLIGKD TELLNGGQMF GNVTFGLTVF TVMVTITVVK 600
 15 MALETHEFTW INHLVWGS I IFYFVSLFY GGILWFFLGS QNMVFVFIQL LSSGSANFAI 660
 TIMVVTCLFL DIKKKVDORH LHPTSTTEKAQ LFTETNAGIKC LDSMCCFPBG EAACASVGRM 720
 LERVIGRCSP THISRGSWSAS DPYTTNDRSI LTLSTMSST C 761

Seq ID NO: C329 Protein Sequence
 Protein Accession #: XP_087461.1

1 11 21 31 41 51
 20 MLPLIAALLA AACFLFPVRG GAADAPGLLG VFSNASVNAS SAASPSPRGC WPRRPPGPPS 60
 ARARRRRRR RRLCNISVQR QMLSELLVRN GRPRGFCQDL LLPSTNAGR AFFAAAHRAV 120
 25 GPPILLIHLG LAAGGAQODL RLCVGCQWVR GRRTGRLRPA AAPSAATAA GAPTALPAYP 180
 AAEPPGGLWL QGBPLHFCCL DFSLEELQGE PGWRLMRKPI ESTLVACFMT LVIVVWSVAA 240
 LTWPVPIAG FLPMGMEQRR TTASTTAATP AAVPAGTTAA AAAAAAATA AVTSGVATK 299

Seq ID NO: C330 Protein Sequence
 Protein Accession #: XP_051522.2

1 11 21 31 41 51
 35 MDLHLFDYSR PGNFSDISWP QNSSDCIWVD TVMCPNMENK SVLLYTLSEFI YIFIFVIGMI 60
 ANSVVVWVNI QAKTIGYDTH CYILNLAIAD LWVVLTIPIV VVSLVQHNQW PMGELTCKVT 120
 HLIFSINLFG SIFFLTCMSV DRYLSITYFT NTPSSRKKMV RRVVCILVWL LAFCVSLPDT 180
 YILKTUTSAS NNETYCRSFY PEHSIKSWLI GMELVSVVLG FAVPFSILAV FYLLARAIAS 240
 ASSDQEKHSB RKIIFSXYVV FLVCWLPYHV AVLLDIFSIL EYIPPTCRLE HALFTALHVT 300
 40 QCLSLVHCVC NPVLVSFINR NYRYELMAEF IPKYSAKTGL TKLIDASRVB ETEYSALBQS 360
 TK 362

Seq ID NO: C331 Protein Sequence
 Protein Accession #: NP_000341.1

1 11 21 31 41 51
 45 MGFVRQIQLL LWNKNTLRKR QRIRFVVVLV WFLSLFLVLI WLRNANPLYS HHECHFPNKA 60
 MPGAGMLPWL QGIFCNVNNP CFQSPPTGES PGIVSNYNNB ILARVYRDPQ ELLMNAPEBQ 120
 HLGRIWTEHL ILSQFMDTLR TPERIAGRG IRIRDILKDE ETLTLEFLKN IGLSDSVVYL 180
 50 LINSQVRPEQ FAKGVEDLAL KDIACSEALL ERFIIFQRR GAKTVRYALC SLSCQGLQWI 240
 EDTLYANVDF FKFLFRVLPTL LDRSQGINL RSWGGILSDH SPRIQEFIRH PSMQDLHWVT 300
 RPLMONGGPE TFKMLMGILS DLLCGYPEGG GSRVLSFNWY EDNNYKAFLG IDSTKDPYI 360
 SYDRRTTSPC NALIQSLEEN PLTKIAWRAA KPLLMGKILY TPDSPAARRI LKNANSTPEE 420
 55 LEHVRKLVKA NBEVGPQIWI FPDNSTQMMN IRDTLGNPTV KDFLNRQLGE BGITAEAILN 480
 FLYKGFRESQ ADDMANEDNR DIFNITDRTL RLVNQYLECL VLBKFEYSND ETQLTORALS 540
 LLEENMFAG VVFPDMYPWT SSLPPHVYKY IRMDIDVVEK TNKIKDRYND SGPRADPVED 600
 FRYTNGGFPY LQDMVEGGIT RSQVQABAFV GIYLQMPYP CFVDSFMII LNRCPPIFMV 660
 LAMIVSVSMT VKSIVLEKEL RLKETLKNQG VSNNAVINCTW FLDSEFSIMSM SIFLLTIFIM 720
 60 HGRILEYSDP FIFLFLPLAF STATIMLCFL LSTFFSKASL AACSCGVITY TLYLPHILCF 780
 AWQDEKTAEL KKAVALSLSPV AFGFGTEYL V RFEEQGLGLQ WSNIGNSPTE GDEFSEFLSM 840
 QMILLDAACY GLLAWYLDQV FPGDYGTPLP WYFLLQSSYN LSGEGCSTRE ERALKEYTEL 900
 TRETEDPEHP BGIHDEFFER BHPGNVPGVC VKNLVKIFEP CGRPVADRIM ITFYENQITA 960
 FLCHNGACKT TTLSILTLGL PPTSGTVLVG GRDIETSLDA VRQSLGMCPQ HNILFHHLTV 1020
 65 AEHMLFYAQL KGSQBEAQL EMBAMLEDTG LEHKKNEEAQ DLSSGGMQRKL SVAIAPVQDA 1080
 KVVILDEPTS GVDYFSRRSI WDLILLKYRSG RTIIMPTEHM DEADHQGDRI AIIAQGRLYC 1140
 SGTFLFLKNC FGTLGLYTLV RKMKNIQSOR KGSSEGTCSB SKGFSTTCPA HVDDLTPBQV 1200
 LDGDVNELMD VVILHVPKAK LVCEIGQELI FLLPNENFKH RAYASLFRRL EETLADLGLS 1260
 SFGISDTPLE SIFLKVTEDS DSGPLFAGGA QQKRENVNPR HPLCLPREKA GQTPQDSNVC 1320
 70 SFGAPAAHPE GQPFPEPCP GPQLWTGTQL VLQHVQALLV KRQETIERE KDFLAQIVLP 1380
 ATFVFLALML SIVILPFGSY PALTLHPWIY GQQTTFESMD EPGSEQFTVL ADVLLNKPGF 1440
 GNRCKLEGWL PEYPCGNSTP WKTSPSVSPNI TQLFQKQWT QVNPSPSCRC STREKLTMLP 1500
 RCPEGAGGLP PQORTQRSTE ILQDLTDRI SDPLVKTYPA LIRBSLKSKE WNVKRYGGI 1560
 STGSKLFPVP ITHGALVGLF SOLGRIMNVS GGPITREASK HIFDLFKHLS TENDIKVWFN 1620
 75 NKGHALYSF LNVAAHLLR ASLPKDRSPE EYGITVIGQP LNLTKQLSE ITVLTTSVDA 1680
 VVAICVIFSM SFVVASVFLY LIQERVNKEK HLQFISGVSP TTYVVTNFWL DIMNYSVSAG 1740
 LVVGIFIGFQ KRAYTSPENL PALVALLILY GWAVIPMYP ASFLFDVPST AYVALSCANL 1800
 FIGINSALT FIKLFDNNR TLRFPNAVLR KLLIVFPFHC LGRGLIDLAL SQAVTDVYAR 1860
 FGEEHSANFP BMDLIGKNLF AMVVEGVVYP LLTLVQRHF FLSCWIAEPT KEPIVDEDD 1920
 80 VAEERQRIIT GQNKTDILRL HELTKIYLGST SSPAVDRLCV GVRFGSCFGL LGVNGAGKTT 1980
 TFMILTGDIT VTSGDATVAG KSILTNISEV HQNMGYCPQF DAIDELLTGR EHLVLYARLR 2040
 GVPABIEIKV ANWSTKSLGL TVYADCLAGT YSGCNKRKLS TAIALIGCFP LVLLDEFTTC 2100
 MDQARRMLN MVIVSILRG RAVVLTSEHM BECEALCTRL AIMVKGAFRC MGTIQHLKSK 2160
 FGDGIYVTMK IKSPKDDLLP DLNEVRFQFP QNEPQSVQRE RHYNMLQFQV SSSSLARIFQ 2220
 LLLSHRDSLL TEYSVTQTT LDQVFNFAK QQTESHDLPL HPRAGASRQ AQD 2273

Seq ID NO: C332 Protein Sequence
Protein Accession #: NP_006662.2

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5      1      11      21      31      41      51
      |      |      |      |      |      |
      M V P H A I L A R G R D V C R R N G L L I L S V L S V I V G C I L G F F L R T R R L S P Q E I S Y F Q F P G E I L M R M 60
      L K M M I L P L V V S S L M S G L A S L D A K T S S R L G V L T V A Y Y L W T T F M A V I V G I F M V S I I H P G S A A 120
      Q K E T T E Q S G K P I M S S A D A L L D L I R N M F P A N L V E A T F K Q Y R T K I T P V V K S P K V A P E A P P R 180
10     R I L I Y G V Q E E N G S H V Q N F A L D I T P P E V V Y K S E P G T S D G M N V L G I V F F S A T M G I M L G R M G 240
      D S G A P L V S F C Q C L N E S V M K I V A V A V N Y F F F G I V F L I A G K I L E M D D P R A V G K K L G F Y S V T V 300
      V C G L V L H G L F I L P L Y F F I T K K N P I V F I R G I L Q A L L I A L A T S S S A T L P I T F K C L E N N H 360
      I D R I A R F V L F V G A T I N M D G T A L Y E A V A A I F I A Q V N N Y E L D F G Q I I T I S I T A T A A S I G A A 420
      G I P Q A G L V T M V I V L T S V G L P T D D I T L I I A V D W A L D R P R T M I N V L G D A L A A G I M A H I C R K D 480
15     F A R D T G T E K L L P C E T K P V S L Q E I V A A Q Q N G C V K S V A E A S E L T L G F T C P H H V P V Q V E R D E E 540
      L P A A S L N H C T I Q S E L E T N V
  
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Seq ID NO: C333 Protein Sequence
Protein Accession #: NP_005680.1

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20     1      11      21      31      41      51
      |      |      |      |      |      |
      M V T V G N Y C E A S G P V G P A W M Q D G L S P C F F F T L V P S T R M A L G T L A L V L A L P C R R R E R P A G A D 60
      S L S W G A G P R I S P V V L Q L L L A T L Q A A L P L A G L A G R V G T A R G A P L P S Y I L L A S V L E S L A G A C 120
25     G I W L L V V E R S Q A R Q R L A M G I W I K F R H S P G L L I L W T V A F A A E N L A L V S W N S P Q W W A R A D L 180
      Q Q Q V Q F S L W V L R Y V V S G G L F V L G L W A P G L R P Q S Y T L Q V H S E D Q D V E R S Q V R S A A Q Q S T W R 240
      D F G R L R L L S G Y L W P R G S P A L Q L V L I C L G L M G L E R A L N V L V P I E Y R N I V N L L T E K A P W N 300
      S L A N T V T S Y V F L K F L Q G G G T G S T G F V S N L R T F L W I R V Q Q F T S R R V E L L I F S H L H E L S L W 360
      H L G R T G T V L R I A D R G T S S V T G L S V L V P N V I P T L A D I I I G I I Y F S M F F N A W F G L I V F L C 420
30     M S L Y L T L I V V T E W R T K F R R A M N T Q E N A T R A R A V D S L L N F E T V K Y C Y A E S Y E V E R Y R E A I 480
      I K Y Q G L E N K S S A S I V L L N Q T Q N L V I G L G L L A G S L L C A Y F V T E Q K L Q V G D Y V L F G Y I I Q L 540
      Y M P L N W F G T Y K R M I Q T N F I D M E N M F D L L K E E T E V K D L P G A G P L R F Q X G R I E F E N V E F S Y A 600
      D G R E T L Q D V S E T V M P G Q T L A L V G P S G A G K S T I L R L L F R P Y D I S S G C I R I D G Q D I S Q V T Q A 660
      S L R S H I G V V P Q D T L F N D T I A D N I R Y G R V T A G N D E V E A A A Q A A G I H D A I M A P P B G Y R T Q V 720
35     G E R G L K L S G G E K Q R V A I A R T I L K A P G I I L L D E A T S A L D T S N E R A I Q A S L A K V C A N E T T I V 780
      V A R L S T V V N A D Q I L V I K D G C I V E R G R H E A L L S R G G V Y A D M W Q L Q Q G Q E E T S E D T K P Q T M 840
      E R
  
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Seq ID NO: C334 Protein Sequence
Protein Accession #: NP_000667.1

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40     1      11      21      31      41      51
      |      |      |      |      |      |
      M L L E T Q D A L Y V A L E L V I A A L S V A G N V L V C A A V G T A N T L Q T P T N Y F L V S L A A A D V A V G L F A 60
45     I P F A I T I S L G F C T D P Y G C L F L A C F V I L V L T Q S S I F S L L A V A V D R Y L A I C V P L R Y K S L V T G T 120
      R A R G V I A V L W V L A F G I G L T P F L G W N S K D S A T N N C T E P W D G T I N E S C C L V K C L F E N V V P M S 180
      Y M V Y F N F F G C V L P L L I M L V I Y I K I F L V A C R Q L Q R T E L M D H S R T T L Q R E I H A A K S L A M T V 240
      G I F A L C W L P V H A V N C V T L F Q P A Q G K N K P K W A M N M A I L L S H A N S V V N P I V Y A Y E N R D F R Y T 300
50     F H K I I S R Y L L C Q A D V K S G N G Q A G V Q P A L G V G L
  
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Seq ID NO: C335 Protein Sequence
Protein Accession #: NP_443164

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55     1      11      21      31      41      51
      |      |      |      |      |      |
      M G L G A R G A W A A L L G T L Q V L A L L G A A H E S A A M A E T L Q H V P S D H T N E T S N S T V K P P T S V A S 60
      D S S N T T V T T M K P T A A S T T T P G M V S T N M T S T T L K S T P K T S V S Q N T S Q I S T S T M T V T H N S 120
      S V T S A A S S V T I T T M H S E A K K G S K F D T O S F V G G I V L T L G V L S I L Y I G C K M Y Y S R R G I R Y R 180
60     T I D E H D A I I
  
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Seq ID NO: C336 Protein Sequence
Protein Accession #: NP_004186.1

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65     1      11      21      31      41      51
      |      |      |      |      |      |
      M A Q E G A M G A F R A L C G L A L L C A L S I G Q R F T G G E G C G P G R L L L G T G Y D A R C C R V H T T R C C R D 60
      Y P G E E C C S E W D C M C V Q E I F H C G D P C C T T C R H H P C P P G Q V Q S Q K F S F S F Q C I D C A S G T F 120
      S G G H S G H C K P W T D C T Q F G F L T V F P G N K T H N A V C V P G S P P A E P L G W L T V V L L A V A A C V L L L 180
70     T S A Q L G L H I N Q L R S Q C M W P R E T Q L L L E V P P S T E D A R S C Q F P E E R G E R S A E E R G R L G D L W 240
      V
  
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Seq ID NO: C337 Protein Sequence
Protein Accession #: BAC03767.1

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75     1      11      21      31      41      51
      |      |      |      |      |      |
      M G C D G R V S Q L L E R N L Q P T L T Y S V F F S F G L C I A F L G P T I L D L R C Q T H S S L P Q I S W V F F S Q 60
      Q L C L L L G S A L G G V F K R I L A Q S L M A L F T S S L A I S L V F A V I P F C R D V K V L A S V M A L A G L A M G 120
      C I D T V A N M Q L V R M Y O K D S A V F L Q V L H F E V G F G A L L S P L I A D E F L S E A N C L P A N S T A N T T S 180
80     R G H L F R V S R V L G Q H H V D A K P W S N Q T F R G L T R K D G A G T R V S Y A F W I M A L I D L E V P M A V I M L 240
      L S K E R L L T C C P O R R P L L L S A D E L A L E T O P P E K E D A S S L P P K F Q S H L G H E D L P S C C Q R K N L 300
      R G A P Y S F F A I H I T G A L V L E M T D G L T G A Y S A F V Y S Y A V E K P L S V G H K V A G Y L P S L F W G F I T 360
      L G R L L S I P I S S R M K P A T M V F I N V V G V V T F L V L L I F S Y N V V F L F V G T A S L G L F L S S T F P S 420
      M L A Y T E D S L Q Y K G C A T T V L V T G A G V G S M V L Q M L V G S I F Q A Q S Y S F L V C G V I F G C L A F T F 480
  
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YILLFFPHRM HPGLPSVFTQ DRSIGMENSE CYQR

514

Seq ID NO: C338 Protein Sequence
 Protein Accession #: NP_002194.1

1	11	21	31	41	51	
MGPERTGAAP	LPLLLVLALS	QGILNCCLAY	NVGLPBAKIF	SGPSSEQFGY	AVQQPINPKG	60
NWLLVGSFWS	GFPENRMQDV	YKCPVDLSTA	TCEKLNQTS	TSIPNVITEMK	TNMSLGLILT	120
RMNMTGGFLT	CGPLWAQCCG	NQYVTTGVCS	DISPDPQLSA	SFSPATQPCP	SLIDVWVVC	180
ESNSIYPWDA	VKNFLSKFVQ	GLDIGPTKTQ	VGLIQYANNP	KVVFNLNTYK	TKEMIVATS	240
QTSQYGGDLT	NTGAIQYAR	KYAYSAAASG	RRSATKVMV	VTDGESHGDS	MLKAVIDQCN	300
HNNILRFGLA	VLGYLNNAL	DTKNLIKEIK	AIASIPTERY	FFNVSDAAL	LEKAGTLGQ	360
IFSIEGTVQG	GDNFQMEMSQ	VGFSA DYSSQ	NDILMLGAVG	AFGWSGTIVQ	KTSHGHLIYP	420
KQAFDQILQD	RNHSYLVGYS	VAAISTGEST	HFVAGAPRAN	YTGQIVLYSV	NENGNITVIQ	480
AHRGDQIGSY	FGSVLCSVDV	DKDTITDVL	VGAPMYMSDL	KKEGGRVYLF	TIRKGLGQHE	540
QFLGSPGEGIE	NTRFSGAIAA	LSDINMDGFN	DVIVGSPLEN	QNSGAVYIYN	GHQGTIRTKY	600
SQKILGSDGA	FRSHLYPFR	SLDGYGDLNG	DSITDVSGIA	FGQVVLWSQ	SIADVAIEAS	660
FYPEKITLVN	KNAQIILKLC	FSARPRPTKQ	NNQVAIVYNI	TLDADQFSSR	VPSRGLFKEN	720
NERCLQKNMV	VNAQSCPEH	IYIQEPESDV	VNSLDLRLVDI	SLENPGTSPA	LEAYSETAKV	780
FSIPFHKDCG	EDGLCISDLV	LDVVRQIPAAQ	BQPFIVSNQN	KRLTFSVTLK	NKRESAYNTG	840
IVVDSENLFF	FASFSLPVDG	TEVTCQVAAS	QKSVACDVGY	PALKREQQVT	FTINFDNLQ	900
NLQNGASLSF	QALSESQSEN	KADNLVNLKI	FLLYDAEHL	TRSTNINPYE	ISSDGNVPSI	960
VHSFEDVCPK	FIFSLKVTIG	SVPVEMATVI	IHIPQYTKBK	NPLMYLTGVQ	TDKAGEDISCN	1020
ADINELKIGQ	TSSESVFKSE	NFRHTKELNC	RTASCNSVTC	WLKDVHMKGE	YFVNVTTRIW	1080
NGTFASSTFO	TQVLTAAASI	NTYNPEIYVI	EDNTVTIFLM	IMKPDKARV	PTGVIGSGII	1140
AGILLALLALV	AILNKLGFPP	RKYKMTXNF	DEIDETTEL	S		1181

Seq ID NO: C339 Protein Sequence
 Protein Accession #: NP_113648.1

1	11	21	31	41	51	
MYRFRARAAP	EGRVRCGAVP	STVLLLLAYL	AYLALGTGVF	WLEGRAAQD	SERSPQRDKN	60
ELLQNFCTID	RPALDSLIRD	VQAYKNGAS	LESENTSMGR	WELVGSFFPS	VSTITTIGYG	120
NLSNPTMAAR	LFCTFFALVG	IPNLVVLNR	LGLHMQQGVN	HWASRLGGTV	QDFDKARMLA	180
GGGALLSGLL	LFLLLPFLLF	SHMEGWSYTR	GYFPATILS	TVGFGDYVIG	MNFSQRYPLW	240
YKNMVELMIL	PGMAWALAL	KLILSQLETP	GRVCSCHHS	SKEDFKSQSW	RQGPDPREPES	300
HSPQGGCTPE	GFMGIIQKLE	PSAHAAGCGK	DS			332

Seq ID NO: C340 Protein Sequence
 Protein Accession #: NP_004145.1

1	11	21	31	41	51	
MEWDNQTGAQ	LGLPFTTCVY	RENFKQLLLP	PVYSAVLAAG	LPLANICVITQ	ICTSRRALTR	60
TAVYTLNLAL	ADLLYACSLP	LLIYNYAQGD	HWFFGDFACR	LVRFLFYANL	HGSILPLTCI	120
SPQRYLIGCH	PLAPWKRGG	RRAAWNCVA	VWLAVTTQCL	PTAIFPATGI	QRNRTVCYDL	180
SPPALATHYM	PYGMALTVIG	FLLPFAALLA	CYCLLACRLC	RQDGFAPFVA	QERRGKAARM	240
AVVVAAPAFI	SFLPFHITKT	AYLAVRSTPG	VPCTVLEAFA	AAYKGTREPPA	SANSVLDPIL	300
FYFTQKKFRR	RPHELLQKLT	AKWQRQGR				328

Seq ID NO: C341 Protein Sequence
 Protein Accession #: NP_009128.1

1	11	21	31	41	51	
MQRPGERLML	VLQVMGSCAA	ISSMDMERPG	DGKCPRIEIP	MCKDIGYNNMT	RMPNLMGHEH	60
QREAAIQLEH	FAPLVEYGCH	GHLRFFLCSL	YAPMCTEQVS	TPIPACRVMC	EQARLKOSPI	120
MBQNFNFKWD	SIDCRKLPNK	NDPNYLCMEA	PNNGSEDEPR	GGGLFPPLFR	PQRPHSAQEH	180
PLKDGPGPRG	GCDNPGKFHE	VEKSASCAPL	CTEGVDVYNS	REDKRFVAVW	LAIWAVLCFF	240
SSAFTVLTLF	IDPARFRYPE	RPIIFLSMCY	CVYSVGYLIR	LPAGAESIAC	DRDSGQLYVI	300
QEGLESTGCT	LVFLVLYYFG	MASSLWNVVL	TLTWFLAAGK	KWGHEATEAN	SSYFHLAAMA	360
IPAVKITILIL	VMREVGADDEL	TGVCYVSGMD	VNALTGFVLI	PLACYLVIGT	SFILSGFVAL	420
FILIRYMKIG	GSNTDKLEKL	MVRIGLFSVL	YTVFATCVIA	CYFYERLNM	YWKILAAQHK	480
CKMNNQTKTL	DCLMAASIPA	VELFMVKIFM	LLVVGITSGM	WYWTSEKTLQ	WQVCSRRLEK	540
KKSRKPPASV	ITSGGIYKKA	QHPQRTTHGK	YEIPAQSPTC	V		581

Seq ID NO: C342 Protein Sequence
 Protein Accession #: NP_005752.1

1	11	21	31	41	51	
MEVSRRKAPP	RPPRPAAPLP	LLAYLLALAA	PGRGADEFVW	RSEQAIGATA	ASQEDGVFVA	60
SGSLDQLDQY	SHSHLSRLY	RDQAGNCTEP	VSLAPPARPR	PGSSFSKLLL	PYREGAAGLG	120
GLLLTGWTFD	EGACEVRPIG	NLSRNSLRNG	TSVVSCHPQG	STAGVYVRAG	RNNRWYLAFA	180
ATVVLPEPET	ASRCNPAASD	HYTALALKDT	EGRSLATQSL	GRKLCEGAG	SLHPVDALFW	240
NGSIYFPYYP	YNYTSGAATG	NPSMARIAGS	TEVLFQQAAS	LDCGHGHPDG	RRLLLSSSLV	300
EALDVWAGVF	SAAAGSGQER	RSPTTALACL	FRMSEIQARA	KRVSWDFKTA	ESHCKSGDQP	360
ERVQPLASST	LHSDLTSTVY	GTVMNRTVL	FLATGQQLL	KVILGELNLS	NCPVITYEIK	420
EETVVFYKLV	PDVKNIIYIY	LTAGKEVRII	RVANCMKEKS	CSECLTATDP	HCGWCHSELQ	480
CTPQGDVCHS	ENLEWLDIS	SGAKKCPKIQ	IIRSSKEKTT	VTVNGSFSPR	HSKCMVKNWD	540
SSRELQCNKS	QNRNCTCTSI	PTRATYKDV	VVNVMSFGS	WNLSDRFNFT	NCSSLEKCPA	600
CVSTGCWACK	SARRCIHPTT	ACDPSDYERN	QSQCPVAVER	TSQGRPKEN	KGNRTNQLAQ	660
VFYIKSTIEPQ	KVSTLGKSNV	IVTGANFTRA	SNITMLKGT	STCDKDVIVQ	SHVLNDTEMK	720

FSLPSSRKEM KDVCIQFDGG NCSSVGSLSY IALPHCSLIF PATTWISGGQ NITMGRNFD 780
 VIDNLIISHE LKONINVSEY CVATYCGFLA PSLKSSKVRT NVTVKLRVQD TYLDCGTLOV 840
 REDPRFTGYR VESEVDTSLE VKIQKENDNF NISKKDIEIT LFRGNGQLN CSFENITRNQ 900
 DLTTILCKIK GIKTASTIAN SSKKVRVKLG NLELYVEQES VPSTWYFLIV LPVLLVIVIF 960
 AAVGVTRHKS KELSRSKQSQQ LELLESELKK EIRDGFAELQ MDKLDVVDSE GTVPFLDYKH 1020
 FALHTFFPES GGFTHIFTED MHNRDANDKN ESLTALDALI CNKSPLVTVI HTLEKQKNFS 1080
 VKDRCLPASF LTIALQTKLV YLTSILEVLT RDLMEQCSNM QPKMLLRTE SVVEKLLTNW 1140
 MSVCLSGFLR ETVGSPFYLL VTLNQNKINK GPVDVITCKA LYTLNEDWLL WQVPEPSTVA 1200
 LNVVFEKIPE NESADVCINI SVNVLDCDTI QQAKEKIFQA FLSEKNGSPYG LQLNEIGLEL 1260
 QMGTROKELL DIDSSSVILE DGITKLNTIG HYEISNGSTI KVFVKIANPT SDVEYSDDHC 1320
 RLILFDSEAF QDVQGRKRRG KHKFKVKENY LTKLLSTKVA IHSVLEKLFK SIWSLPNSRA 1380
 PFAIKYFFDF LDAQAENKKI TDPDVVHINK TNSLPLRFVW NILKNPQVVF DIKKTPHIDG 1440
 CLSVIAQAFM DAFSLTBQQL GKEAPINKIL YAKDIPTYKE EVKSYKPAIR DLPPLSSEM 1500
 EEFLTQESKK HENEFNEEVA LTEIYKYIVK YFDEILNKLE RERGLEEAQK QLLHVXVLEF 1560
 EKKCKKWM 1568

Seq ID NO: C343 Protein Sequence
 Protein Accession #: NP_002176.1

1 11 21 31 41 51
 | | | | |
 NTILGTTTFM VPSLLQVVSG ESGYAQNGDL EDDELDDYSF SCYSQLEVNG SQESLTCARE 60
 DDPVMTTNLE FEICGALVEV KLINFRKLQE IYFIETKKFL LIGKSNICVK VGEKSLTCKK 120
 IDLTTIVKPE APFDLSVIYR EGANDFVVTF NTSHLQKKYV KVLMDVAYR QEKDENKHT 180
 VNLSTKILTL LQRKLQPAAM YEIKVRSIPD HYFKGFWSEN SPSTYFRTPE INNSSGEMDP 240
 ILTISILSF FSVALLVILA CVLWKKRIKP IVWPSLPDHK KLEHLCKKP RKNLNVSENP 300
 ESFLDCQIHR VDDIQRDEV EGFLODTFFQ QLESEKQRL GGDVQSPNCP SEDVVVTFES 360
 FGRDSSITCL AGNVASADAP ILSSSRSLDC RESGKNGPHV YQDILLSLGT TNSTLPPPPS 420
 LQSGILTLNP VAQQCPILTS LGSNQERAYV TMSSFYQNG 459

Seq ID NO: C344 Protein Sequence
 Protein Accession #: NP_002713.1

1 11 21 31 41 51
 | | | | |
 MAAARLCLSL ILLSTCVALL LQPLLGAQGA PLEPVYPGDN ATPSQMAQYA ADLERYINML 60
 TRPRYKGRHK EDTLAFSEWG SPHAAVPREL SPLDL 95

Seq ID NO: C345 Protein Sequence
 Protein Accession #: NP_115934.1

1 11 21 31 41 51
 | | | | |
 MTWRHEVRLL FTVSLALQII NLGNSYQREK HNGGREEVTK VATQKHRQSP INWTSSEHFE 60
 VTGSAPGMBE EEPLPYSRAP GEGASAREPC CRNGGTCVLG SFCVCPARFT GRVCEHDQRR 120
 SECGALEHGA WTLRACHLCR CYPGALHCLP LQTFDRCDPK DFLASHAHGP SAGGAPSLLL 180
 LLPCALLHRL LRPDAPAHPR SLVPSVLQRE RRPCGRPGLG HRL 223

Seq ID NO: C346 Protein Sequence
 Protein Accession #: NP_006524.1

1 11 21 31 41 51
 | | | | |
 MARSLVCLGV IILLSAFSGP GVRGGPMFKL ADRKLCADQE CSHPISSMAVA LDQYMAEDCR 60
 FLTHRGQVV YVFSKLGKRG RLFWGGSGVQG DYTGDLAARL GYFPSSIVRE DQTLKPKQVD 120
 VKTDKNDFFYC Q 131

Seq ID NO: C347 Protein Sequence
 Protein Accession #: Eos sequence

1 11 21 31 41 51
 | | | | |
 MTQVTEKSTE HPEKITSTTE KTRTPPEKPT LYSEKTICTK GKNTFVPEKP TENLGNITLT 60
 TETIKAPVKS TENPEKTAAY TKTIKPSVKV TGDKSLTTTS SHLNKTEVTH QVPTGSFTLI 120
 TSRTKLSSIT SEATGNESHP YLNKDGSKQG IHAGQMGEND SFPANAIVIV VLVAVILLIV 180
 FLGLIFLVSY MMRTRRLITQ NTQYNDAEDS GGPNSYPVYL MEQQNLGMGQ IPSFR 235

Seq ID NO: C348 Protein Sequence
 Protein Accession #: NP_543146.1

1 11 21 31 41 51
 | | | | |
 MTQVTEKSTE HPEKITSTTE KTRTPPEKPT LYSEKTICTK GKNTFVPEKP TENLGNITLT 60
 TETIKAPVKS TENPEKTAAY TKTIKPSVKV TGDKSLTTTS SHLNKTEVTH QVPTGSFTLI 120
 TSRTKLSSIT SEATGNESHP YLNKDGSKQG IHAGQMGEND SFPANAIVIV VLVAVILLIV 180
 FLGLIFLVSY MMRTRRLITQ NTQYNDAEDS GGPNSYPVYL MEQQNLGMGQ IPSFR 235

Seq ID NO: C349 Protein Sequence
 Protein Accession #: FGENSEH predicted

1 11 21 31 41 51
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5	MWRIAFCCW	GLALVSGWAT	FQMSPSRNF	SPRLPPETAP	GAPGSIPAPP	APGDEAAGSR	60
	VERLQAFRR	KVRLRLRLSE	RLELVFLVDD	SSSVGEVNF	SELMFVRKLL	SDFFVVFAT	120
	RVAIVTF8K	NYVVRVVDYI	STRRARQHKC	ALLLQEIPI	SYRGGGTYTK	GAPQQAQIL	180
	LHARENSTK	VFLITDGYSN	GGDFRPIAAS	LRDSGVLEPT	FGIWQGNIRE	LNDMASTPK	240
	EHCYLLHSE	EFEALARRAL	HEDLPSGSFI	QDDMVHC5YL	CDEGKDCDDR	MGSCKCGTHT	300
	GHFEICCEK	YYGKQLQYEC	TACPSGTYKP	EGSPGGISSC	IPCDEENHTS	PPGSTSPEDC	360
	VCREGYRAG	QTCSELVHCPA	LKPPENGYFI	QNTCNNHMA	ACGVRCRPGF	DLVGSIIILC	420
	LPNGLWSGE	SYCRVTRCPH	LRQPKHGHIS	CSTRMLYKT	TCLVACDEGY	RLEGSCKLTC	480
10	QGNQWDFGE	PRCVERHCST	FQMEKDVIIIS	PHNCGKQPAK	FGTICYVSCR	QGFILSGVKE	540
	MLRCITSGK	NVGQAAVCK	DVEAPQINCP	KDIEAKTLEQ	QDSANVTWQI	PTAKDNGSEK	600
	VSVHVHPFT	PPYLPFPGDV	AIVYTATDLS	GNQASCIFEI	KVIDAEPPVI	DWCRSPPPVQ	660
	VSEKVAASW	DEPQFSDNSG	AELVITRSH	QGDLPFQGET	IVQYTATDPS	GNRTCDIHI	720
	VKGSPPCEP	PTPUNGDFIC	TPDNTGVNCT	LTCLEGYDFT	EGSTDKYCA	YEDGVWKPT	780
15	TTWPDCAKK	RFANHGPKSF	EMFYKAARCD	DTDLMKGFSE	AFETTLGKMV	PSFCSDAEDI	840
	DCRLLENLTK	KYCLEYNDY	ENGFAIGFEG	WGAANRLDYS	YDDPLDTVQE	TATSIGNAKS	900
	SRIKRSAPLS	DYKIKLIPNI	TASVPLPDER	NDTLEWENQQ	RLQLTLETIT	NKIKRTINKD	960
	PMYSQPLASE	LIADNSLSLE	TKKASPPCRP	GBVLGRMCMV	NCPLGTYYNL	EHFTCSERI	1020
	GSYQDEEGQL	ECICLCP8OMY	TEYIHSRNI	DCKAQCKQGT	YSYSGLETCE	SCPLGTYPK	1080
20	FGSRSCLSQP	ENTSTVKKGA	VNLSACGVPC	DEKFKSRSG	MFCHPCPRDY	YQPNAGKAPC	1140
	LACPFYGTTP	PAGERSITEC	STSVLINITIF	GGPGHLELLN	CFSEVFEHCF	FNPCHNGGTC	1200
	QQLGRGYVCL	CPLGYTGLKC	ETDIDECSP	PCLNNGVCKD	LVGEFICBCP	SGYTQQRCE	1260
	NINECSSSP	LWKGICVDGV	AGYRCTCVKG	FVGLHCETEV	NECQSNPCLN	NAVCEQVGG	1320
	FLCKCPRGL	TRCCKNVDE	CLSPCKNGA	TCKDGANSP	CLCAAGTGS	ECCLNINECQ	1380
25	SNCRNQAT	VDELNSYCK	QCPGFSKRC	ETEOSTGFM	DEFVSGIYGY	VMLDGLRSL	1440
	HALTCTFMWK	SSDDMNNGTF	ISYAVDNGSD	NTLLLTIDYNG	WVLVYNGREK	ITNCP8VNDG	1500
	RWHIATITW	SANGIWKVYI	DGKLSDDGAG	LSVGLPIPG	GALVLCQBD	KKGGGFSAP	1560
	SPFSGISQIN	LIADNSLSLE	VKSLATSCPE	ELSKGNVLAW	PDPLSGIVGK	VKIDSKSIFC	1620
	SDCPLRGGSV	PHLRTASDEL	KPGSKVNLFC	DPGFQLVGNP	VQYCLNQGGW	TQPLPHCERI	1680
30	SCGVFPFLPN	ENTSTVKKGA	GSTVTYQCN	GYLLGDSRM	FCTDNGSWNG	VSPCLDVE	1740
	CAVSDCS8H	ASCLNVDSGY	ICSCVFPYTG	DGKNCAPPIK	CKAPGNPENG	HS8GEITYVG	1800
	AGVTFSCQEG	YQLMGVTKIT	CLSGEWNHL	IPYCKAVSCG	KPAIPENGCI	ELLAFTPGSK	1860
	VTYRCNKGYT	LWKGICVDGV	AGYRCTCVKG	FVGLHCETEV	NECQSNPCLN	NAVCEQVGG	1920
35	YSCTDGYSLQ	GPSIIECTAS	GIWDRAPPAC	HLVFCGEPPA	IKDAVITGNN	PTFRNTVYT	1980
	CKBGTLAGL	DTIECLADCK	WSRSDQCCLA	VSCDEPIVD	HASPETAHRL	PGDIAFYCS	2040
	DGYSLADNSQ	LICNAQGGKIV	PFEGQDMPRC	IAHPCCKPPS	VSY8ILESVS	KAKFAAGSVV	2100
	SFKCM8GFVL	NTSAKIECMR	GGQWNPSPMS	IQCLPVRGCE	PPSINMGYAS	GSNYSFGAMV	2160
40	AYSCKNGFYI	KGEKSTCEA	TGQWSSPIPT	CHPVSCGEP	KVNGFLEHT	TGRIFSEVR	2220
	YQCNPGYKSV	GSPPVVCQAN	RHWSESPLM	CVPLDCGKPP	PIQNGSMRGE	NFEVGS8VQF	2280
	FCN8GYELVG	DSSWYQCKSG	KNNKSNPKC	MPAKCPEPPL	LENQLVLKEL	TTEVG8VTF8	2340
	CK8GYELVGP	SVLKCLPSQ	WNS8FVCKI	VLC8PPPLIS	FGVP8PSBAL	HFG8TVKYSC	2400
	VGGFFLRGNS	TILCQPDGTW	SSPLPECVPV	ECQPF8EIPW	GIIDVQGLAY	L8TALYTCKP	2460
	GF8LVGNTIT	LC8G8H8WIG	GKPTCKAIEC	LKPK8ILNGK	FSYTDLHYGQ	TVYT8CN8RG	2520
45	RL8G8SALTC	LET8G8W8DVA	P8CNAIECDS	PQPIENG8VE	GADYSYGAI	IYSCPF8GFQV	2580
	AGHAMQIC8E	SGW888IPTC	MPIDCQLP8H	IDF8D8CKLK	DDQ8YFEQED	DM88V8V8VTP	2640
	HP8VHL8AVA	KTW8NTK8EP	ATH888N8LYG	TM88YT8CNP8	YELL8N8FVLI	CQ88GT8WNG8	2700
	AP8C8I8IB8C	LPTAP8NG8FL	RPT888M88SA	VQ88Y8CK8PHI	L888DL8RL8CL	EN88K8W8G88P	2760
50	R8C8A8I88CKP	NP88VM888IK8	SN88YT8L8T8LY	Y8C8DP8GY8VLN	GT88RT8CQ8D	KN88W88888P8I	2820
	IP88VD8888PPV	SANG88V888DE	YT88FQ88E8I8YT	CN8888FL888GA	RS888V88CLANG8	WS888AT88P88CVP	2880
	VR88CAT88P88QLA	NG88VT888LDY8	FM8888VT888FHC8	8888Y888L88GAPK	L888C8888888W8D	AE888PL88CK8PVN	2940
	CG88PF8888LA8G	FP88888888FI8G	GH8888Y888C8FP8	YK888888888888	CL888888888888	SP8888CL8888CRCS	3000
	TF88V888888888	GT888888888888	RI888888888888	L888888888888	D8888888888888	CB888888888888	3060
55	MI888888888888	SN888888888888	SS888888888888	SS888888888888	V888888888888	PL888888888888	3120
	AN888888888888	Y888888888888	L888888888888	DT888888888888	W888888888888	K888888888888	3180
	HIL888888888888	VN888888888888	888888888888	888888888888	888888888888	888888888888	3240
	H888888888888	888888888888	888888888888	888888888888	888888888888	888888888888	3300
	KAD888888888888	888888888888	888888888888	888888888888	888888888888	888888888888	3360
	L888888888888	888888888888	888888888888	888888888888	888888888888	888888888888	3420
	GV888888888888	888888888888	888888888888	888888888888	888888888888	888888888888	3480
60	SC888888888888	888888888888	888888888888	888888888888	888888888888	888888888888	3540
	PN888888888888	888888888888	888888888888	888888888888	888888888888	888888888888	3557

Seq ID NO: C350 Protein Sequence
Protein Accession #: F8RNE8H predicted

65	1	11	21	31	41	51	
	MRFSVSGMRT	DYPRSVLAPA	YV8VCLLLLC	PREVIAPAGS	EPMLCQ8APR	CGDKIYNPL8	60
	QCCYNDAIV8	L8ET8RQCBPP	CTFWPCFELC	CLDSFGLTND	FVVKLVKYG8V	NSQCH888PIS	120
70	SK8C888888						129

Seq ID NO: C351 Protein Sequence
Protein Accession #: AAH35671.1

75	1	11	21	31	41	51	
	MVP888888888888	LARA888888888888	ALL888888888888	RLQ888888888888	CGHLV888888888888	GTMT888888888888	60
	TYPNHTVCEK	TITV888888888888	IL888888888888	SQTCAS888888888888	PT888888888888	YCG888888888888	120
	LL888888888888	RF888888888888	RG888888888888	DH888888888888	R888888888888	SK888888888888	180
80	VAG888888888888	D888888888888	KA888888888888	DEL888888888888	Q888888888888	IL888888888888	240
	GS888888888888	T888888888888	FE888888888888	SS888888888888	D888888888888	RL888888888888	300
	SG888888888888	RE888888888888	K888888888888	GS888888888888	V888888888888	M888888888888	360
	LVN888888888888	GN888888888888	NN888888888888	Y888888888888	Q888888888888	GC888888888888	420
	LV888888888888	SV888888888888	IT888888888888	ST888888888888	IP888888888888	FA888888888888	480
	RK888888888888	GS888888888888	WK888888888888	H888888888888	DN888888888888	DL888888888888	539

Seq ID NO: C352 Protein Sequence
Protein Accession #: Eos sequence

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1	11	21	31	41	51	
MSPGAGQRLR	PVPAPRSSAE	EAARPGQLRL	GIRRGAEALA	KLAPSGVMVP	GARGGGALAR	60
AAGRGLLALL	LAUSAPLRLO	AEELGDGCGH	LVTYQDSGTM	TSKNYPGTYP	NHTVCEKTI	120
VPKGKRLILR	LGDLIDBSQT	CASDYLLFTS	SSDQYGFYCG	SMTVPKELLL	NTSEVTVRFE	180
SGSHISGRGF	LLTYASSDHP	DLITCLERAS	HYLKTEYSKF	CFAGCRDVAG	DISGNMVDGY	240
RDTSLLCKAA	IHAGIIADEL	GGQISVLQRK	GISRYEGILA	NGVLSRDGSL	SDKRFLFTSN	300
GCSRSLSEFP	DGQIRASSSW	QSVNESGDQV	HWSFGQARLQ	DQGPSWASGD	SSNNHKPREW	360
LEIDLGEKKK	ITGIRTTGST	QSNFNFYVKS	FVMNPKMNSG	KWKTYKGIVN	NEEKVFDGNS	420
NFRDPVQNNF	IPPIVARYVR	VVPQTNHQRI	ALKVBLIGCQ	ITQGNDSLVM	RKTSQSTSVS	480
TKKEDETITR	PIPSEETSTG	INITTVALPL	VLLVVLVFPAG	MGIFAAPFRK	KKKGSPYGSA	540
BAQKTDCKWQ	LKYPFAHQSS	AEPTISYDNE	KEMTQKLDLI	TSDMAG		586

Seq ID NO: C353 Protein Sequence
Protein Accession #: FGENSEH predicted

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1	11	21	31	41	51	
MFQRQERFLD	LSSAEAVAAM	ILEQHPDIIN	KGDGCGHLVT	YQDSGTMSTK	NYPGTYENHT	60
VCEKTIITVFK	GKRLILRLGD	LDIESQTCAS	DYLLFTSSSD	QYGMQKEEST	EVLCLSLVAGA	120
QRVDIPVQLL	PSFLBSWKGH	ADARGPYCGS	MTVPKELLLN	TSEVTVRSES	GSHTSGRGFL	180
LYTASSDHL	LITCLERASH	YLKTEYSKFC	PAGCRDVAGD	ISGNMVDGYR	DTSLCLKAAI	240
HAGIIADELG	GGISVLQRKH	ISRYEGILAN	GVLSDGSL	DKRFLFTSNG	CSRSLSEFPD	300
GQIRASSSWQ	SVNESGDQVH	WSPGQARLQD	QGPSWASGDS	SNNHKPEREWL	EIDLGEKKKI	360
TGIRTTGSTQ	SNFNFYVKSF	VMMNPKMNSK	WKTYKGIVNN	EEKVFDGNSN	FEDPVQNNFI	420
PPIVARYVRV	VQTNHQRIA	LKVLIGCQI	TQGNDSLVMR	KTSQSTSVST	KKEDETITRF	480
IPSEETSTDA	MFVQIVGDET	QMISQRENLG	FDEGKIFPKG	TAESMVRVVP	AVVNDLGMIL	540
FLAHTPEEDI	DHYCHKQIKY	PFAREQSAEF	TISYDNEKEM	TQKLDLITSD	MADYQQPLMI	600
GGTVTRKGS	TRPRMDTDAE	EAGVSTDAGG	HYDCPQRAGR	HEYALPLAPP	EPEYATPIVE	660
RHVLRAHTFS	AQSGYRVPGP	QPGHKHSLSS	GGFSPVAGVG	AQDGDYQRP	SAQPADRGYD	720
RPKAVSALAT	ESGHFDSQKP	FTHPGTSDSY	SAPRDCILTPL	NQTAMTALL		769

Seq ID NO: C354 Protein Sequence
Protein Accession #: NP_004607.1

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1	11	21	31	41	51	
MAGVSACIKY	SMFTFNFLFW	LOGILILALA	IWVRVNSDSQ	AIFGSEDVGS	SSYVAVDILI	60
AVGAIIMILG	FLGCCGAIKE	SRCLMLLFFI	GLLLILLLQV	ATGILGAVFK	SKSDRIVNET	120
LYENTKLLSA	TGESEKQFQE	AIIVFQEEFK	CCGLVNGAAD	WGNMNFQHYE	LCACLDKQRP	180
CQSYNGQVY	KETCISGFIK	FLAKNLIIVI	GISFGLAVIE	ILGLVFSMVL	YQQIGNK	237

Seq ID NO: C355 Protein Sequence
Protein Accession #: NP_004608.1

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1	11	21	31	41	51	
MCTGGCARCL	GGTLIPLAFF	GFLANILLFF	PGGKVIDDND	HLQGEIWFPG	GILGSGVIMI	60
FPALVFLGLK	NNDCGCGCGN	EGCGKRFAMF	TSTIFAVVGF	LGAGYSFIIS	AISINKGPKC	120
LMANSTWGYF	FHDGDYLNDE	ALMNNKCREPL	NVVPPNLTFL	SILLVVGSIQ	MVLCAIQVNN	180
GLLGLTQSDC	QCCGCCGSDG	PV				202

Seq ID NO: C356 Protein Sequence
Protein Accession #: NP_002372.1

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1	11	21	31	41	51	
MFRPAPARRL	PGLLLLLWPL	LLLESAAPDP	VARPGFRRLE	TGPGGGSFGR	RSPAPAPDGA	60
PASGTSEPRG	ARGAGVCKSR	PLDLVFIIDS	SRSVRPLEFT	KVKTFVSRII	DTLDIGPADT	120
RVAVVNYAST	VKIRFQLQAY	TDKQSLKQAV	GRITPLSTGT	MSGLAIQTAM	DEAFTVEAGA	180
REPSNIPKVF	AIIVTDGRPQ	DQVNEVAARA	QASGIELYAV	GVDRADMASL	KMMASEPLEE	240
HVFYVETYG	TERLSSRFQE	TFCALDPCVL	GTRQCQHVCI	SDGEGKHCE	CSQGYTLNAD	300
KKTCGALDRC	ALNTHGCEHI	CVNDRSGSYH	CECYEGYTIN	EDRKTCSAQD	KCALGTHGCO	360
HICVNDRTGS	RHCECYEGYT	LNADKKTCSV	RDKCALGSHG	CQHICVSDGA	ASYHCDCTPG	420
YTINEDKRTC	SATSEARRLV	STEDACGCEA	TLAFQDKVSS	YLQRLNTKLD	DILKRLKINE	480
YQGIHR						486

Seq ID NO: C357 Protein Sequence
Protein Accession #: NP_057723.1

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1	11	21	31	41	51	
MARGSLRRL	RLVLGLWLA	LLRSVAGEQA	PGTAPCSESG	SHSADLOKCM	DCASCRRAPH	60
SDFLGCAAA	PPAPFRLWPE	ILGGALSULTF	VLGLLSQFLV	WRRRCRRREKF	TPPIETGTGE	120
GCPAVALIQ						129

Seq ID NO: C358 Protein Sequence
Protein Accession #: NP_001810.1

1 11 21 31 41 51
 5 MQPTLLLSLL GAVGLAAVNS MPVDNRNHNH GMVTRCTIEV LSNALSKSSA PPITPECRQV 60
 LKTSRKDVKD KETTENENTK FEVRLLRDPD DASEAHSSSS RGEAGAPGEE DIQGPTKADT 120
 EKWAEGGGHS RSRADSEQNS LYPSDSQVSE EVKTRHSEKS QREDEEEEG ENYQKGERGE 180
 DSSPEKHLEP PCETQNAFLN ERKQASAIKK EELVARSETH AAGHSQ&KTH SREKSSQESG 240
 KEAGSQENHP QESKGQPRSQ ESEEGEEDA TSEVDKRRTR PRHHHGRSRP DRSSQGGSLP 300
 SESEKHPQEE SEESNVSMAS LGEKRDHHSY HYRASEEPE YGEIKGYPG VQAPEDLEWE 360
 10 RYRGSGSEY RAPRPQSEES NDEEDKRNYP SLELDKMAHG YGESSEEEERG LEPGKGRHHR 420
 GRGGEPRAYF MSITRESEKRF LGECHHRVQE NQMDKARRHP QGAWKELDN YLNYGEGAP 480
 GKWQQQGDLO DTKENREAR FQDKQYSSHH TAEKKRRLGE LFNFPYDPLQ NKSSHFERRD 540
 NMNDNFLBGE EENELTLNEK NFFPEYNIDW WEKPFSESDV NWGYEKRLA RVPKLDLKRQ 600
 YDRVAQLDQL LHYRKSAEP PDFYDSEEPV STEQEAENEK DRADQTVLTE DEKKELENLA 660
 15 AMDLHLQKIA EKFSQRG 677

Seq ID NO: C359 Protein Sequence
 Protein Accession #: XP_093082.1

1 11 21 31 41 51
 20 MKLLCEGLKQ PNCVLQTLRW YRCLISSASC GALAAVLSTG QWLTELEFSE TKLEASALKL 60
 LYGGKLDKNC KLQKLNLFQS LSVTAAKLPV GMVNCSEGS GSVLQSHFGY CQDSSPKCDL 120
 CKLLWPSRKY AARDCGSPK SFLSEGLNWA GRLEAVEEVL GLGLVLPQPD PASQGGGHC 180
 25 NYGSRDLVD LEVKAEPSELR KGGMDLQRP LQVLLCKIF SLKLEFLIAL PMSFGQVSVV 240
 QVTIPDGVM VTVGSNVTLI CIYTTIVASR EQLSIQWSEF EKKEMEPISS PWEKGPWDV 300
 EAVKGTLDGQ QRELQIYFSQ GGOAVAIGQF KDRITGSNDP GNASITISEM QPADSGIYIC 360
 DVNNPPDLG QNQLNLSVSV LVKPSKPLCS VQGRPETGHT ISLSCLSAIG TSPFVYVHRK 420
 LEGRDIVPVK ENFNPTTGIL VIGNLTNFEQ GYQCTAIAR LGNSSECEID TSSHPVGLI 480
 30 VGALIGSLVG AAILISVVCF ARNKAKAKAK ERNKTIAEL EPMTKINPRG RSEAMPREDA 540
 TQLEVTLPSS IHETGPDITQ EPDYEPKFTQ EPAPPEAPGS EPMVAPDLID ELELEPETQS 600
 ELEPEPEPEP ESEPGVVVEP LSEDEKGVVK A 631

Seq ID NO: C360 Protein Sequence
 Protein Accession #: FGENSEH predicted

1 11 21 31 41 51
 35 MVFAFWKVL ILSCLAGQVS VVQVTIPDGF VNVTVGSNVT LICITYTTVA SREQLSIQWS 60
 FFHKKEMEPI SSPWESEKWP DVRAVKGTLG GQQAELQIYF SQGGQAVAIG QFKDRITGSN 120
 40 DPGASITIS RMQPADSGIY ICDVNNPPDP LGQNQGLNV SVLVKPSKPL CSVQGRPETG 180
 HTISLSCLSA LGTPSPVYVYV HKLEGRDIVP VKENFNPTTG ILVIGNLTNF EQGYQCTAI 240
 NRGNSCEI DLTSSHPVVG IIVGALIGSL VGAAIISVSV CFARNKAKAK AKERNKTLA 300
 45 ELFPMTKINE RGESEAMPRE DATQLEVTLP SSTHETGPD TQEPDYEPK TQEPAPPEAP 360
 GSEPMVAPDL DLELEPET QSELEPEPEP EPSEPGVVV EPLSEDEKCV VKA 413

Seq ID NO: C361 Protein Sequence
 Protein Accession #: NP_003011.1

1 11 21 31 41 51
 50 MVSEMVETML SGLLFWLASG WTPAPAYSFR TPDRVSEADI QRLHGVMEQ LGIARPRVEY 60
 PAEQAMNLVG PQSISGGAHE GLQLHGPFGR IPNIVAEITG DNIPKDFSED QGYDPPNFC 120
 FVGKTDGCL ENTPTDAPFS REFQLHQLF DPEDYFGLG KWKKCLLYEK MKGGERRKR 180
 55 SVNPLYGQR LDNVVAKSV EFSDEKDP E 211

Seq ID NO: C362 Protein Sequence
 Protein Accession #: NP_076926.2

1 11 21 31 41 51
 60 MTTHQCEQA MPQAGGVVPQ LGNMAVIRSH LNKGLQEKFL KGEPKVLGVV QILTALMSLS 60
 NGITMMCMAS NIYGSNPISV YIGYTIWGSV MFIISGSLSI AAGIRTTKGL VRGSLGMNIT 120
 SSVLAASGIL INTFSLAFYS FHHPYCNYG NSNNCEGMS ILMGLDGMVL LLSVLEFCIA 180
 65 VSLAAGCKV LCCTPGGVVL ILPSSHMAE TASPTPLNEV 220

Seq ID NO: C363 Protein Sequence
 Protein Accession #: NP_002082.1

1 11 21 31 41 51
 70 MRGSELPLVL LALVLCIAPR GRAVPLPAGG GIVLTMYPR GNENAVGHLN GKKTGESSS 60
 VSRGSLKQQ LREYIRNBSA ARNLLGLIA KENRNHQPQ PKALGNQPS WSEDSNFK 120
 DVGSKGVGR LSAPGSQREG RNPQLNQ 148

Seq ID NO: C364 Protein Sequence
 Protein Accession #: NP_036393.1

1 11 21 31 41 51
 80 MDLQGRGVPS IDRLRVLLML FHTMAQIMAE QEVNLSGLS INPEKDIFVV RENGTCLMA 60
 SFAAKFIVPY DVWASNVVDL ITEQADIALT RGAEVKRCG ISQSELQVFW VDRAYALML 120
 FVKESHNSK GPEATWRLSK VQFVYDSSEK THPKDAVSAG KHTANSEHLS ALVTPAGKSY 180
 ECQAQQTISL ASSDPQKTVT MILSAVHIQ FDIISDFVS EEHKCPVDER BQLEETPLI 240
 LGILGLVIM VTIAIYVHH KMTANQVQIP RDRSQYKMG 280

Seq ID NO: C365 Protein Sequence
Protein Accession #: NP_003217.1

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1      11      21      31      41      51
|      |      |      |      |      |
MLGLVLALLS SSSABEYVGL SANQCAVPAK DRVDCGYPHV TPKECNRRCG CPDSRIPGVP 60
WCFKPLTRKT ECTF                                     74

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Seq ID NO: C366 Protein Sequence
Protein Accession #: NP_002984.1

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1      11      21      31      41      51
|      |      |      |      |      |
MSLPSSRAAR VPGPSGLCA LLALLLLLTG PGPLASAGPV SAVLTELRCT CLRVTLRVNF 60
KTIGKLQVFF AGPQCSKVEV VASLKNKQV CLDFEAPFLK KVIQKILDG NKN 114

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Seq ID NO: C367 Protein Sequence
Protein Accession #: NP_005233.2

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1      11      21      31      41      51
|      |      |      |      |      |
MRSPSAANLL GAAILLAASL SCSGTIQGTN RSSKGRSLIG KVDGTSEVTG KGVTVETVFS 60
VDFPSASVLT GKLTTFVLPV VTIIVFVVLG PANGMALWVF LFRTEKCHPA VIYMANLALA 120
DLLSVIWFPL KIAYHIHANN WYGEALCNV LIGFFYGNMY CSILFMICLS VQRYWVIVNF 180
MSHGRKKANI AIGISLAIWL LILLVTIPLY VVKQTFIPA LNITTCDDVL PQQLLVGDMF 240
NYFLSLAIGV FLFPALFAS AYVLMIRMLR SSAMDENSEK KRKRAIKLIV TVLAMYLICF 300
TFSNLLLVVH YFLIKSQGQS HVYALYIVAL CLSTLNSCID PFVYVYVSHD FRDHAKNALL 360
CRSVATVKQM QVSLTSEKHS KSSSSYSSSS TTVKTSY 397

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Seq ID NO: C368 Protein Sequence
Protein Accession #: NP_003460.1

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1      11      21      31      41      51
|      |      |      |      |      |
MAEAKTHWLG AALSLIPLIF LI9GAEAASF QRNQLLQKEP DLRLNVQKF PSFEMIRALE 60
YIENLRQQAQ KEESSPDYNP YQGVSVPLQQ KENGDRSHLP ERDSLSEEDW MRILBALRQ 120
AENEPQSAFK ENKPYALNSE KNFPDMSSDD YETQGNPERK LKEMQFPFMY EENSNDNPFK 180
RTNEIVEEQY TPQSLATLES VFQELGKLTG PNNQKRERMQ BEQKLYTDDS DDIYKANNTA 240
YEDVVGSEDW NPVSEKIESQ TQBEVRDSKE NIGKNEQIND EMKRSGQLGI QBEDLKESEK 300
DQLSDDVSKV IAYLKRIVNA AGSGLQNGQ NGERATRLFE KPLDSQSIYQ LIEISRNLQI 360
PFDLIEMLK TGERKNGSVE PERELDLVD LDDISEADLD HFDLFQNRML SKSGYPKTPG 420
RAGTEALPDG LSVEDIWLL GMSSAANQKT SYFFNPYNQE KVLRLPYGA GRSRNQLPK 480
AANIPIHVENR QMAYENLNDK DQELGEYLAR MLVKYPIIN SNQVKRVPGQ GSSEDLLQES 540
EQIEQAIKEH LNQSSSQETD ELAPVSKRFP VGPPKNDTTP MRQYWDDELL MKVLYLNQE 600
KAEKGRHIA KRAMENM                                     617

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Seq ID NO: C369 Protein Sequence
Protein Accession #: NP_112217.1

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1      11      21      31      41      51
|      |      |      |      |      |
MPCAQRSNLA NLSVVAQLIN FGALCYGRQP QPGFVRFPPDR RQEHPIKGLP EYHVVGPRV 60
DASGHFLSYG LHYPTTSRR KRDLGSEEDW VYIRISHREK DLFFNLTVNQ GPLSNZYIME 120
KRYGNLSVVK MMASAPLCH LSGTVLQGGT RVGTAAASAC HGLTGFFQLP HGDFFIEPVK 180
KHLVVEGGYH DHIVYRQKV PETKEPTCGI KDSVNISQKQ ELWREKNERH NLPSRLSRR 240
SISKERNVET LVVADTKIE YHGSENVESY ILTIMMVITG LFHNEFSIGNA IHIVVRLIL 300
LEBEEQGLKI VHAARKTLSS FCKWQKSNP KSDLNPFVHD VAVLLTRKDI CAGFMPCET 360
LGLSHLSGMC QPFRSCNINE DSGPLAFTI AHELGHSPGI QEDGKENDCE FVGREPYIMS 420
RQLQYDPTPL TWSKCSSEYI TRFLDRGWGF CLDDIFPKKG LKSKVIAPGV IYDVHQCQL 480
QYGPATFQO EVBNVCQTLW CSVKGFCBSK LDAAADGTQC GEKKNCMAGK CITVGGKFPES 540
IPGCGWGNRP WSHCSRTCSA GVQSAERLCN NPEFKHGGKY CTGERKRYL CNVHPCRSEA 600
PTFRMQCSE FDTVPYKML YHWFPIENPA HPCELYCRPI DGQFSEKMLD AVIDGTPCFE 660
GGMSRNVGIN GICKMVGCDY KIDSNATEDR CGVCLGDSBS CQTVRKMFQ KEGSGYVDIG 720
LIPKGARDIR VMEIAGANF LAIRSEDEK YYINGGFIIQ WNGNYKLAGT VFQYDRKDEL 780
EKLNATGPTN ESWVIQLLFQ VTNPQIKYEX TIQKGLDND VEQMYFWQYG HWTECSVTCG 840
TGIRRTAHK IKKGRGVKA TFCDFETQPN GRQKKCHKA CFPRWAGEN EACSATCGPH 900
GEKKRTVLCI QIMVSDQAL PFTDCQHLK PKYLLACND ILCPSDWTVG NWSBCSVSCG 960
GGVRIASVTC AKNHDEPCDV TRKPNRSLC GLQCCPSRR VLKPNKGTIS NGKNPPTLXP 1020
VPEPTSRPM LTPITGPESM STSTPAISSP SPTTASKEGD LGGKQWQDS TQPELSSRYL 1080
ISTGSTSQPI LTSQSLSIOP SEENVSSDT GPTSEGLVA TTSGSGLSS SRNPITWPT 1140
PFYNTLTKEP EMEIHSKSGE SREQPEKDE SNTVINTKIR VEGNDAPVES TEMPLAPPLT 1200
PDLSEBSWPF PFSTVMEGLL PSQRTTSET GTPRVGEMVT EKPAITLLFL GGDHQPEPSG 1260
KTANRNHLKL PNNMQTKSS EPVLTEEDAT SLITEGFLN ASNYKQLTNG HGSAMHIVGN 1320
WSKSTTCGL GAYWRKVECT TQMSDCAAI QRDPDAKRC LRPCAGWKGV NWSKCSRNC 1380
GGFKIREIQ VASRIQHLR PFECQFLAGI PPPLSMSCNP EPCRAWQVEP WSQCSRSCGG 1440
GVQSGVFCE GGLCDWTKRP TSTMSCNEHL CCHWATGND LCSTSCGGGF QKRIVQCVPS 1500
BONKTEDQD CLCDEKPRFP EFKCNQWAC KKSADLLCTK DKLASAPCQT LKAMKCSVP 1560
TVRAECFPC PQTHHTTQR QRRQLQKS KEL 1593

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Seq ID NO: C370 Protein Sequence
Protein Accession #: NP_001053.1

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1      11      21      31      41      51

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	1	11	21	31	41	51	
	NRQSHQLFLV	GLLLFSPTPS	QLCEICEVSE	ENYIRLKLPL	NTMIQSNYMR	GTSAVNVVLS	60
	LKLVGQIQIT	DMQKMIQIK	YNVKSRLSDV	SSGELALIL	ALGVCNNAEE	NLIYDYHLTD	120
5	KLENKFAEAI	ENMEAHNGTP	LTMYYQLSLD	VLALCLFNNG	YSTAEVNVHF	TPENKNYYFG	180
	SQFSVDTGAM	AVLALTCVKK	SLINGQIKAD	EGSLKNISIV	TKSLVEKILS	EKKENGILGN	240
	TFSTGEAMQA	LFVSSDYNE	NDWNCQQTLM	TVLTBISQGA	FSNFMAAAQV	LPALMGKTFI	300
	DINKOSSCVS	ASGNFNISAD	EPITVTFFDS	QSYISVNYSV	RINETYFTNV	TVLNGSVFLS	360
	VMEKAQKMD	TIFQFTMBER	SWGPIYITCIQ	GLCANNNDRT	YWELLSSGEP	LSQAGSYVY	420
10	RNGENLEVRW	SKY					433
	Seq ID NO: C371 Protein Sequence						
	Protein Accession #: NP_004582.1						
15	1	11	21	31	41	51	
	MCCTKSLLLA	ALMSVLLHL	CGSEBAASNF	DCCLGYTDRI	LHPKFIVGFT	RQLANEGCDI	60
	NAIIFHTKKK	LSVCANPKQT	WKYIVRLLS	KKVKGNM			96
	Seq ID NO: C372 Protein Sequence						
	Protein Accession #: NP_037403.1						
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	MAGSFLNWP	RAGGVGLVL	LLLGLPRFPF	ALCARPVKEP	RGLSAAAPPL	AETGAPRRFR	60
25	RSVPRGEAAG	AVQELARALA	HLLEAERQER	ARAEQAQBAED	QQAQVLAQLL	RVWGAPRNSD	120
	PALGLDDDDP	APAAQLARAL	LRRLDPAL	AAQLVPAPVP	AAALRPPEFV	YDDGPAQPD	180
	EEAGDETFOV	DFELLRYLLG	RILAGSADSE	GVAAPRRLR	AADHDVGSSEL	PPBGVLGALL	240
	RVKRLTPAP	QVPARRLLFP					260
30	Seq ID NO: C373 Protein Sequence						
	Protein Accession #: NP_002236.1						
35	1	11	21	31	41	51	
	MLQSLAGSSC	VRLVERHRS	WCFGLVLGY	LLYLVFGAVV	FSSVELPYED	LRLQELRLK	60
	RRFLEHEHCL	SEQQLEQFLG	KVLEASNYGV	SVLENASGNW	NWDFTSALFF	ASTVLSTTGY	120
	GHTVPLSDGG	KAFCLIIYVI	GIPPTLLFLT	AVVQRITVHV	TRRPVLYFHI	RWGFSGQVVA	180
	IVHAVLLGFV	TVSCFFPIPA	AVFSVLEDDW	NFLESFYFCE	ISLSTIGLGD	YVPGSGYNQK	240
40	FRELYKIGIT	CYLLGLLIAM	LVVLETFCEL	HELKRFKRMF	YVKDKDKDEDQ	VHIIEDHQLS	300
	FSSITDQAG	MKEDQKQNEP	FVATQSSACV	DGPANH			336
	Seq ID NO: C374 Protein Sequence						
	Protein Accession #: NP_005463.1						
45	1	11	21	31	41	51	
	METTINGTETW	YESIHAVLKA	LNATLESNLL	CRPGGGLGPD	NQTEERRASL	PGRDDNSYMY	60
	ILFVMFLFAV	TVGSLILGYT	RSRKVDKRSD	PYHVYIKNRV	SMI		103
50	Seq ID NO: C375 Protein Sequence						
	Protein Accession #: NP_005236.1						
55	1	11	21	31	41	51	
	MGRRLALLLL	LLLLQHFQGD	SDGSQRLEQT	PLQFTHLEYN	VTQENSAAK	TYVGHFVRMG	60
	VYITHPANEV	RYKIVSGDSR	NLFKAHEYIL	GDYCFRLIRT	KGNATAIINR	EVKDHITLIV	120
	KALEKNTNVE	ARTKVRVQVL	DINDLRPLFS	PTSYSVSLPE	NTAITSIAR	VSATDADIGT	180
	NGEPTYSFKD	RTDMFAIHPT	SGVIVLTGRL	DYLETKLYEM	EILAADRCMK	LYGSSGISEM	240
	AKLTVHTBQA	NFCAPVITAV	TLSPELDRD	PAYATVVD	CDQGANGLA	SLSVAGDAL	300
60	QQFTVRSFP	GSKEYKVKAI	GDIDWDSHPF	GYNLTQAKD	KGTTPQFSSV	KVHVTSPOF	360
	KAGEVKEFKD	VYRAEISEFA	PPNTPVMVK	ALPAYSELRY	VFKRTPGKAK	FSLNXTGLI	420
	SILEPVKRQQ	AAHFELBVTI	SDRKASTKVL	VKVLGANSNP	PEPTQTAYKA	AFDENVPIGT	480
	TIMLSAVDP	DEGENYVTV	SIANLMHVPF	ALDHFTGAVS	TSENLDYELM	PRVYTLRIRA	540
	SDWGLFYRRE	VEVLATITIN	NLNDNTPLFE	KINCEGTIPR	DLGVGEQITT	VSAIDADEIQ	600
65	LVQVQIEAGN	ELDLFSLNPN	SGVLSLKRLS	MDGLGAKVSP	HSLRITATDG	ENFATPLYIN	660
	ITVAASHKLV	NLQCBETGVA	KMLAKILQA	NKLHNQGEVE	DIFEDSHSVN	AHLPQFRSTL	720
	PTGIQVKKNG	PVGSSVIFMN	STDLDTGPNQ	KLVAVSGGN	EDCFMIDME	TGMLKLLSPL	780
	DRETTDKYTL	NITVYDLGIP	QKAARLLLEV	VVDANDNPP	EVLQSSYFVE	VSEDEKVHSE	840
	LIQVEATDKD	LGPNGBVTYS	ILTDITPTFSI	DSVTGVVNIA	RPLURELQHE	HSLKLEARDQ	900
70	AREKEQLFST	VVVKVSLQDV	NDNPTTFIFP	NYRVKVEDL	PEGTVMWLS	AHDFDLGQSG	960
	QKRYSLLDHG	EGNFDVQKLS	GAVRIVQQLD	FEKQVYMLT	VRADKGGKPV	SLSSTCYVEV	1020
	EVVDVNNELH	PPVFSFVEK	GTVKEDAPVG	SLVMTVSAHD	EDAGRDGEIR	YSIRDGSGVG	1080
	VFKIGERTGV	IETSDRLDRE	STSEYWLTVF	ATDQGVVFLS	SFIEIYIEVE	DVNDNAPQTS	1140
	EPVYYPEIMS	NSPKDVSVVQ	IRAFDPDSSS	NDKLMYKITS	GNPQGFSSIH	PKTGLITTS	1200
75	RKLDRQODE	HILEVTVDN	GSPPKSTIAR	VIVKILDEND	NKPQFLQKPY	KIRLPEREKP	1260
	DRENRARREP	YVESAAVGSV	EGENARISYS	IEDGNEHGK	FIEPKTGVS	SKRFSAGEY	1320
	DILSLKAVDN	GRQKSTTR	LHIEWISKPK	QGLEPTSFEE	SFTPTVMES	DPVAHMIGVI	1380
	SVEPPGPIEL	FDITCGNYDS	HFDVDKGTGT	LIVAKPLDRE	QKSNYNLTVE	ATDGTITILT	1440
80	QVFIKVIDIN	DHPPQFSTSK	YKVVIPEDTA	PETELQISA	VQDEKNKLI	YTLQSSKDFL	1500
	SLKKEFLDPA	TGSLYTSEKL	DHEAVSPARL	TVMVDRQDVP	VKRNFAITV	NVSDTNDHAP	1560
	WFTASSYKGR	VYESAAVGSV	VLQVTALDKD	KGNVAVLYS	IESGNIGNIG	NSFMIDPVLG	1620
	SIKTAKELDR	SNQAEYDLMV	KATDKGSPFM	SEITSVRIFFV	TIADNASPKF	TSKEYSVELS	1680
	ETVSGISFVG	MVTAEBSQSSV	VYEKIDQNTG	DAFDINPSSG	TIITQKALDF	ETLPIYTLII	1740
	QGTNNAGLST	NITVLVHLQD	ENDNAPVFMQ	AEYTGILISE	ASINSVVLTD	RNVFLVIRAA	1800

	DADKDSNALL	VYHIVEPSVH	TYFALDSSTG	AHHTVLSLDY	ESTSIFHFTV	QVHDMGTPRL	1860
	FAEYAAENVV	HVIDINDCPP	VPAKPLYEAS	LLLPTYKGVK	VITVNATDAD	SSAFSOLLYS	1920
	ITEGNIGKKF	SMOYKTGALT	VQMTTQLRSR	VELTVRASDG	RFAGLTSEVKI	NVKESKESHL	1980
5	KFTQDVYSAY	VKENSTEAET	LAVITAIGSP	INEPLFYHIL	NPDRRFKISR	TSGVLSTTGT	2040
	PFDREQQEAF	DVVVEVIEBH	KPSAVAHVVV	KVIVEDQNDN	APVFVNLEPY	AVVKVDTEVG	2100
	EVIRVVTAVD	RDSGRNGEVH	YYLKEHHEHF	QIGPLGEISL	KKQPELDTLN	KSYLVTVVAK	2160
	DGGNPAFSAE	VIVPITVMNK	AMPVFKEPPY	SABIAESIQQ	HSPFVHVQAN	SPBGLKVFFS	2220
	ITDGDFFSQF	TINFNTGVIN	VIAPLOFEAH	PAYKLSIRAT	DSLGTGAHAEV	FVDIVDDIN	2280
10	DNPPVFAQQS	YAVTLSEASV	IGTSVVQVRA	TDSDSEPNRG	ISYQMFQNHES	KSHDHPHVDN	2340
	STGLISLLRT	LDYEQSRQHT	IFVRAVDGGM	FTLSSEVDIVT	VDVTDLNGNP	PLPEQQIYEA	2400
	RISSEHAPGH	FVTCVKAYDA	DSSDIDKLQY	SILSGNDHKK	FVIDSATGII	TLNHLRHAL	2460
	KPFYSNLNSV	SDGVFRSSTQ	VHVTVIGGNL	HSPAFLQNEY	EVELAENAPL	HTLVMEVKT	2520
	DGDSGIYGEV	TYHIVNDFAK	DRFYINERGG	ITPLEKLDRE	TPAEKVISVR	LMAXDAGGKV	2580
	AFCTVNVILT	DNDNAPQFR	ATKYEVNIGS	SAAKGTSVVK	SASDADEGSN	ADITYALEAD	2640
15	SESVKENLSI	NKLSGVITTK	ESLIGLENEF	FTFFVRAVDN	GSPSKRSVVL	VYVKILPEPM	2700
	QLPKPSEPFY	TFTVSEDPV	GTEIDLIRAE	HSQTVLVSLV	KGMTPEMNED	ESFVIDRQSG	2760
	RLKLEKSLDH	ETTKWYQFSI	LARCTQDDRE	MVASVDVSIQ	VKDANDNSPV	FESSPYEAFI	2820
	VENLPGGSRV	IQIRASDADS	GTNGQVMYSL	DQSQSVKEIE	SFAMNMTGW	ITTLKELEHE	2880
20	KRDNYQIKAV	ASDHGEKIQ	SSTAIVDVT	TDVNDSPPRF	TABTYKGTVS	EDDPQGGVIA	2940
	ILSTTDADSE	RINQVITYFI	TGGDPLGQFA	VTIQNEWKV	VYKFKLDREK	RDNVLLTITA	3000
	TGDTFSSKAI	VEVKVLAND	NSPVCEKTL	SDTIPEDVLP	GKLIMQIEAT	DADIRSNABI	3060
	TYTLIGSGAE	KFKNFPDTGE	LKTSTPLDRE	EQAVYELLVR	ATDGGGRFCQ	ASIVVILEDV	3120
	NNDNAPEFAD	PYAITVFENT	EPGTLTTRVQ	ATDADAGLNR	KILYSLIDSA	DGQFSINELS	3180
25	GIQLEKIKAV	RELQAVTIS	LKAVDQGLPR	RLTATGTIV	SVLDINDNEP	VFEYREYGAT	3240
	VSEDILVCTE	VLOQVYASRD	IEANAEITYS	IISGNEHGRF	SIDSKTGAVF	IENLDYESS	3300
	HEYILTVEAT	DGGTSPSLSD	ATVNVNVTDI	NMTFVFSQD	TYTTVISEDA	VLEQSVITVM	3360
	ADDADGPNIS	KIHYSITIDGN	QSSSFTIDPV	RGEVKVTKLL	DRETISGYTL	TVQASDNGSP	3420
	PRVNTTTVNI	DVSDVNDMAP	VFSRGNYSVI	IQENKPVGFS	VQLVVTDED	SSHNGPPFF	3480
30	TIVTGMDEKA	FEVNPQGVLL	TSSAIKRKEK	DHYLLQVKVA	DNGKPOLSSL	TYIDIRVIEE	3540
	STYPPAILPL	BIFTTSSGEE	YSGGVIGKIH	ATDQDVIDTL	TYSLDFQMDN	LFSVSSTGKK	3600
	LIARKKLDIG	QYLLNVSVTD	GKFTTVADIT	VHIRQVTQSM	LNBTIATREPA	NLTPSEFVGD	3660
	YWRNFQRLR	NILGVRGNDI	QIVSLQSSSE	HPHLDVLLFV	EKFGSAQIST	KQLHRCINSS	3720
	VTDISEIIGV	RILNVFQKLC	AGLDCPWKFC	DEKVSVDSEV	MSTHSTARLS	FVTPRHHRAA	3780
35	VCLCKEGRCP	FVHEGCEDDP	CPEGSECVSD	PWEEKHTCVC	PSGREGQCPG	SSMTLTGNS	3840
	YVKYRLTENE	NKLEMKLXMR	LRTYSTHAVV	MYARGTDYSI	LEIHHGRIQY	KFDCGSGEGCI	3900
	VSVSQIQVND	QGWHAVALSV	NGNYARLVLD	QVHTASGTAP	GTCLKTNLND	VVFFQGHIRQ	3960
	QSTRHGRSRG	VNGFRGCMQ	SIYLNQQLP	LNSKPRSYAH	IEESVDVSPG	CPLTATEDCA	4020
	SNFCQNGGVC	NPSRAGGYIC	KCSALYIGTH	CELSVNPCSS	NPCLYGGTCV	VDNNGFVCCQ	4080
40	RGLYTGQRCV	LSPYCKDEPC	KNGGTCFDSL	DGAVCCQDSG	FRGERQSDI	DECSGNFLCH	4140
	GALCENTHGS	YHCNCSHEVR	GRHCEDAAPN	QYVSTFWNIG	LAEGIGIVVF	VAGIFLLVWV	4200
	FVLCRKMIKR	KKKHQASPKD	KHLGPATAFL	QRPFYDSKLN	KNTYSDIPPQ	VPVRPISTYP	4260
	SIFSDSRNML	DRNSPEGSAY	PEHPEFSTFN	PESVHGRHKA	VAVCSVAPNL	PPFPSENEPS	4320
	DSDSIQKPSW	DDYDTKVVD	LDPCLSKKFL	SEKPSQPYSA	RESLSEVQSL	SSQFSESDD	4380
45	NGYHMDTSW	MPSVPLEDDP	SEPNVEVIDE	QTPLYSADPN	AIIMDYTPGG	YDIESDFPPP	4440
	PEDFPAADEL	PPLPEPFEMQ	FESIHPPTIM	PAAGSLGSSS	RNRQRFNLNQ	YLPNFPILDM	4500
	SEPQTKGTGE	NSTCREPHAP	YPPGYQRHFE	APAVESMFM	VYASTASCSD	VSACCEVESE	4560
	VMSDYESGD	DGHFBEVTP	PLDSQQHTV				4590

Seq ID NO: C376 Protein Sequence
Protein Accession #: NP_055035.1

	1	11	21	31	41	51	
55	MCYKGCARCI	GHSVLGLALL	CLAAHILLYF	FNGETKYASE	NHLSRFVWFF	SGIVGGGLIM	60
	LLPAFVFIGL	EQDDCCGCGG	HEHCGKRCAM	LSSVLAALIG	IAGSGYCVIV	AALGLAEGFL	120
	CLDSLQGWNY	TPASTEGQYL	LDTSWSECT	EPKHIVEWNV	SLPSIILALG	GIEFILCLIQ	180
	VINGVLGGIC	GRCCSEQQY	DC				202

Seq ID NO: C377 Protein Sequence
Protein Accession #: NP_003750.1

	1	11	21	31	41	51	
65	MSTENVEGKP	SNLGERGRAR	ESTFLKVVQF	MFNHSIFTSA	VSPAARIRF	ILGERDDSPA	60
	PPQLETELDE	LLAVDQGEHE	WKETARWIKF	EEKVBQGGER	WSKEHVATLS	LHSLFELRTC	120
	MEKGSIMILDR	EASSLPQLVE	MIVDQIETG	LLKPELKDKV	TYTLIRKERR	QTKSKMLRSL	180
	ADIGKTVSSA	SRMFTNPDNG	SPAMTERNLT	SSSLNDISDK	PEKDQLKNKF	MKKLPDRAEA	240
	SKVLNVEVD	LDTPPIAFVR	LQAVMLGAL	TEVPVPTREF	FILGPGKGA	KSYHETGRAI	300
70	ATLMSDEVFE	DIAYKADREH	DLTAGIDEFL	DEVIVLPPGE	WDPAIRIEPP	KSLPSSDKRK	360
	NMYSGGENVQ	MNGDTPEDDG	HGGGEGDCR	ELQRTGRFCG	GLIKDIKRKA	PPFASDFDYA	420
	LNIALSAIL	FIYLATVTNA	ITPGGLLGD	TDMQGVLES	FLGTAVSCAI	PCLFAGQPLT	480
	ILSBTGFLV	FERLLFNFVK	DNNFDYLEFR	LWIGLWSAPL	CLILVATDAS	FLVQYFTRFT	540
	REGFSLSLSF	IFYDYAFKFM	IKLADYYPIN	SNFKVGYNTL	PSCTCVPEDP	ANISISNDTT	600
75	LAPFYLPTMS	FLQVLCIAL	DWAFLSKKEC	SKYGGNLVGN	NCNFVPDITL	MSFILHLGTY	660
	TSSMALKKFK	TSYPFPTTAR	KLISDPAILL	SILIFCVIDA	LVGVDTPKLI	VPSEFKPTSP	720
	NRGHEVPPFG	ENFWVWCLAA	AIPALLVTIL	IPMDQQTAV	IVNRKEHNLK	KGAGYHLDLF	780
	WVAITMVIC	LMALFWYVAA	TVISIAHIDS	LKMETETSAP	GEQPKFLGVR	EQRYVTGLVF	840
	ILTGLSVFMA	ETLKFLPMFV	LYGVFLYMGV	ASLNGVQFMD	RLKLLMLPLK	BQPDFIYLRH	900
80	VPLRRVHLEF	FLQVLCIAL	WILKSTVAAT	IFPVMILALV	AVRKGMDYLF	BQHDLSFLDD	960
	VIPKDKKKK	KDEKKKKKK	GSLSNDNDS	DCFYSEKVES	IKIPMDIMEQ	QPFLLSDSKPS	1020
	DRERSPTFLE	RHTSC					1035

Seq ID NO: C378 Protein Sequence
Protein Accession #: NP_000949.1

1 11 21 31 41 51
 5 MSTPQVNSSA SLSPDRLNSP VTIPAVMFIF GVVGNLVAIV VLCKSRKEQK ETIFYTLVCG 60
 LAVTDLLGTL LVSPVTIATY MKGQWPGGQP LCEYSTFILL FFSLSGLSII CAMSVERYLA 120
 INHAYFYSHY VDKRLAGLTL FAVYASNVLF CALPMNGLGS SRLQYPTDWC FIDWTINVT 180
 HAAYSIMYAG FSSEFLIATV LCNVLVCGAL LRMHRQFMRR TSLGTQJHHA AAAASVASRG 240
 HPAASPALER LSDFRRRRSF RRIAGASIQM VILLIATSLV VLICISILVV RVFVNQLYQP 300
 10 SLEREVSQNP DLQATRIASV NPILDPIWYI LLRKTVLAKA IEKIKCLFCR IGGSRRRERG 360
 QRCSDSQRTS SAMAGHSRSF ISRELKEISS TSQTLLPDLS LPDLSENGLG GRNLLPGVPG 420
 MGLAQEDTTS LRTLRISETS DSSQGDSES VLLNDEAGGS GRAGPAPKGS SLQVTFPSET 480
 LNLSEKCI 488

Seq ID NO: C379 Protein Sequence
 Protein Accession #: NP_002650.1

1 11 21 31 41 51
 20 MGHPPPLPLL LLLHTCVPAS WGLRCMQCKT NGDCRVEECA LGQDLCRITTI VRLWEEGSEL 60
 ELVEKSCITHS EKTNRNLSYR TGLKITSLTE VVCGLDLNCQ GNSGRAVITYS RSRYLECISC 120
 GSSDMSCERG RHQSLQCRSP EQQCLDVVTE WIQEGEEGRF KDDRHLRCCG YLPGPCPGNG 180
 PHNNTYFHF KCCNTTKCNE GPILLEENLP QNGRCYCSCK GNSHGCSSSE ETLIDCRGP 240
 MNQCLVATGT HEPKNQSYMV RGCATASMCQ HAHLGDAFSM NHIDVSCCTK SGCNEPDLV 300
 25 QYRGAAPQP GPABLSTLIT LMTARLWGG TLLWT 335

Seq ID NO: C380 Protein Sequence
 Protein Accession #: BAB55406.1

1 11 21 31 41 51
 30 MDEFSGQVDP LASVILPPLL LENLSPEDSV LVERRAQFTFF NKTGLFQDVG PQRKTLVSYV 60
 MACSIGNITI QNLKDPVQIK IKHTRTQEVH HPICAFWDLN KNKSPGGWNT SGCVAHDRSD 120
 ASHTVCLCNH PTFQVLMDEL PRSASQLDAR NTKVLTFISY ICGGISALFS AATLLTYVAF 180
 35 EKLRRDYPK ILMLLSTALL PLNLLFLDDG WITSPNVDGL CIAVAVLHFF PLLATFTWNG 240
 LEAHHMYIAL VKVFNTYIR YILKFCIIGW GLPALVSVV LASNNNEVY GKESYVGKKG 300
 DEFCWIDPV IFYVTCAGYF GVMFFLNIAF FIVVMVQICG RRGKRSNRTL RESVLNLR 360
 VVSLTFLMG TWGFAPFAGW PLNIPFMYLF SIFNSLQGLF IFIFHCAMKE NVQKQWRHL 420
 CCGRFRLADN SDWSKATANI IKKSSDNLGK SLSSSSIGSN STYLTSKSKS SSTTYFKENS 480
 40 HTDNVSYEHS FNKSSSLRQC FEGQVLVETG PC 512

Seq ID NO: C381 Protein Sequence
 Protein Accession #: NP_000565.1

1 11 21 31 41 51
 45 MTVARPSVPA ALPLLQELPR LLLLVLLCLP AVWGDCGLPP DVFNAQPALE GRTSFFEDTV 60
 ITYKCESFV KIPGEDSVI CLKSGQWSDI EEPNRSCEV PTRLNSASLK QPYITQNYFP 120
 VGTVVVEYECR PGVRRPESLS PKLTCLQNLK WSTAVEFCK KSCPNGEIR NGQIDVPGGI 180
 50 LFGATISFSC NTGYIKLFGST SSFCLISGSS VQWSDPLEEC REIYCPAPPQ IDNGIIQGER 240
 DHVGYRQSVT YACNEGPTMI GEHSIYCTVN NDEGENSGFP PEKCRGSLTS KVPPTVQKPT 300
 TVNVPTTSS PTSQKTTIKT TTFNAQATRS TPVSRTTKHF HETTPNKGSG TTSGTTRLLS 360
 GHTCFTITGL LGTLVTMGLL T 381

Seq ID NO: C382 Protein Sequence
 Protein Accession #: Eos sequence

1 11 21 31 41 51
 60 MDTSLGLVLL SLFVLLQLAT GGSSPRSGVL LRGCPTHCHC EPDGRMLLRV DCSDLGLSEL 60
 PSNLVFTSY LDLSMNNISQ LLPNPLPSLR FLEELRLAGN ALTYIPKQAF TGLYSLKVL 120
 LQNNQLREV TEALQNLRS QSLRLDANHI SYVPPSCFSG LHSRLHLWLD DNALTEIPVQ 180
 AFRLSALQA MTLALNKIHH IPDYAFGNLS SLVVLHLHNN RTHSLGKKCF DGLHSLTLD 240
 65 LNNYNNLDEFP TAIRTLNLK ELGFHNNPIQ FVGRSAFQHL PELRTLTLLG ASQITEFPDL 300
 TGTANLESLT LTGAQISSLP QTVCNQLPNI QVLDLSYLL EDLPSFSVCQ KLQKIDLRHN 360
 RIYELKVDTF QQLSLRLSLN LANNKIAIHH PNAFSTLPSL IKLDLSSNLL SSEFTTGLHG 420
 LTHLKLTGMH ALQSLISSEH FPELVIEEM YAYQCCAPGV CSNAYKISNQ WNKGDNSMD 480
 DLHKRDAGMF QAQDERDLEF FLDDFEEDLK ALHSVQCSFS PGPFKPCERL LDGWLIRIGV 540
 WTIKAVLALT NALVTSVFR SPLIYSFIKL LIGVIAAVNM LTGVSSAVLA GVDAPTFGSF 600
 70 ARHGAWWENG VGCHVIGFLS IFASESSVFL LTLAALERSF SVKYSAKFET KAPFSSSLKVI 660
 ILLCALLALT MAVPLLGGS KYGASPLCLP LPFGHPSIMG YMVALLINS LCFIMMTIAY 720
 TKLYCNLDKG DLEMINDCSM VKHIALLLFT NCILNCPVAF LSPSSLINLT FISPEVIKFI 780
 LNVVPLPAC LNPILYLIFN PHFKEDLVSL RKQTYVWTRS KHPSLMSINS DDVEKQSCDS 840
 TQALVTFTSS SITYDLPESS VPSPAYFVTE SCHLSSVAZF PCL 883

Seq ID NO: C383 Protein Sequence
 Protein Accession #: NP_003658.1

1 11 21 31 41 51
 80 MDTSLGLVLL SLFVLLQLAT GGSSPRSGVL LRGCPTHCHC EPDGRMLLRV DCSDLGLSEL 60
 PSNLVFTSY LDLSMNNISQ LLPNPLPSLR FLEELRLAGN ALTYIPKQAF TGLYSLKVL 120
 LQNNQLREV TEALQNLRS QSLRLDANHI SYVPPSCFSG LHSRLHLWLD DNALTEIPVQ 180
 AFRLSALQA MTLALNKIHH IPDYAFGNLS SLVVLHLHNN RTHSLGKKCF DGLHSLTLD 240
 LNNYNNLDEFP TAIRTLNLK ELGFHNNPIR SIPEKAFVGN PELTITHFYD NPLQFVGRSA 300

FOHLPELRTL TLNGASQITE FPDLTGTANL ESLTLTGAQI SSLPQTVCNQ LPNLQVLDLS 360
 YNLLSDLPFS SVCQKLQKID LRNEIYEIK VDTFQQLLSL RSLNLAWNKI AIHPNAPST 420
 LPSLKLKDL SMLSSFPIT GLHGLTHLKL TGNEALQSLI SSENFPCLKV IEMPYATQCC 480
 AFGVCENAYK ISNQWNGKDN SSMDDLHKKD AGMFQAQDER DLEDPLDDE EDLKALHSVQ 540
 CSPSPGPFKP CEHLDDGLI RIGVWTIAVL ALTCLNLTVS TVFRSPLVIS PIXLLIGVIA 600
 AVNMLTGVSS AVLAGVDAPT FGSFARHGAW WENGVGCHVI GFLSIPASES SVFLTLAAL 660
 ERGFSVKYSA KPETKAPFSS LKVIILLCAL LALTMAAVPL LGSSKYGASP LCLPLPFGE 720
 STMGMVALI DLNSLCFLMM TIAYTKLYCN LDKGDLNIW DCSMVKHIAL LLFTNCILNC 780
 PVAFLSFSSL INLTIFISPEV IKFILLVVVF LPACLNPLLY ILFNPHFKED LVSLRKQTYV 840
 WTRSKHPSLM SINSDDVEKQ SCDSTQALVT FTSSSITYDL PPSSVFPSPAY PVTESCHLSS 900
 VAFVPC 907

Seq ID NO: C384 Protein Sequence
 Protein Accession #: NP_003497.1

15
 1 11 21 31 41 51
 MEMFTLLTC IFLEPLLRGHS LFTCEPITVP RCMKMAYNMT FFPNLMGHYD QSIAAVEMEH 60
 FLPLANLECS FNIETFLCA FVPTCIEQIH VVPPCRKLCE KVSIDCKKLI DTFGIRWPEE 120
 20 LECRLQYCD STVPVTFDPH TEFLGQKKT EQVORDIGFN CPHRLKTSQG QGYKFLGIDQ 180
 CAPPCPNMYP KSDELEFAKS FIGTVSIFCL CATLFTFLTF LIDVRRFRYP ERPIIYSVC 240
 YSIVSLMYFI GFLLDGSTAC NKADEKLELG DTVVLGSKNK ACTVLFMLLY FFMAGTVWW 300
 VILITWFLA AGRRKSCBAI BQKAVWPHAV ANGTGFLTV MLLALNKVEG DNISGVCVFG 360
 25 LYDLASRYF VLLPLCLCVF VGLSLLLAGI ISLNHVRQVI QHGRNQEKI KKFMRIGVF 420
 SGLYLPLVLT LLGCYVVEQV NRITWEITWV SDHCRQYHIP CPHYAKAKAR PELALEMIKY 480
 LMLTIVGISA VFWVSGKKTC TSWAGFFKRN RKRDPISER RVLQESCEFF LKENSKVKKK 540
 KKHYPSSRK LKVISKSMGT STGATANHGT SAVAITSHDY LGQETLTETQ TSPETSMREV 600
 KADGASTPRL RQDQCEPAS PAASISRLSG EQVDGKGQAG SVSESARSEG RISPKSDITD 660
 30 TGLAQSNLQ VPSSESPSSL KOSTELLVHP VSGVRKEGG GCHSDT 706

Seq ID NO: C385 Protein Sequence
 Protein Accession #: NP_000573

35 1 11 21 31 41 51
 MRAIVICECL LGITCAIFVK QADSGSSREK QLYNKYPDAV ATWLNPDPEQ KQNLAPQTL 60
 PSKNSHSHH MDMDDDDDD DHDVDSQSDID SMDSDDDVD DSHQSDSH HSDSDSLVT 120
 DFFTLDPATE VFTEVTFVD TYDGRGDSVV YGLRSKSKCF RRPDIQYFPA TDEDITSHME 180
 40 SEELMGAYKA IPVAQDLNAP SDWDSRGKDS YETSQLDDQS AETHSHKQSR LYRKANDES 240
 NEHSDVIDSQ ELKVSREHF SHEFHSHEDM LVVDPKSKER DEHLKFRISH ELDBASSEVN 300

Seq ID NO: C386 Protein Sequence
 Protein Accession #: NP_002812

45 1 11 21 31 41 51
 MGAARGSPAR FRRLPLLSVL LLPLLGSTQT AIVFIKQPS8 QDALQRRAL LRCEVEAPGP 60
 VEVYNLLDGA BVQDTEREPA QGSSLSFAAV DRLQDSGTFQ CVARDDVTGE BARSANASFN 120
 50 LKWIAGPVV LKHPASABAI QPQTQVTLRC HEDGEPRTY QWFRDGTLS DGQSNETVSS 180
 KERNLTLRPA GPEHSGLYSC CAHSAPQAC SQQNFTLSIA DESPARVIA PQDVVVARYE 240
 EAMFHQFSA QPPFSLQWLF EDETPIITNS REPHLRRATV FANGSLLLTQ VPRNAGIYR 300
 CIGQQRGFP IILEATLHLA HEDMPLFEP RVFTAGSER VCLPPKGLP EPSVWWEHAG 360
 VRLPTEGRVY QKQHLVLAN IARESDAGVYT CHAANLAGQR RQDVNITVAT VPSWLKKEFD 420
 55 SQLEBSKPGY LDCLOATPK FTVVVYRNQM LISEDSRFEV FNGTLRINS VEVDGTWYR 480
 CMESTPAGSI BAQARVQVLE KIKFTFPFQP QQCMEFDKEA TVPCSATGRE KPTIKNEAD 540
 GSSLPEWVD NAGTLHFARV TRDDAGNYTC IASNGPQQI RAHVQILTAV FITEKVEPER 600
 TTVYQHTAL LQCEAQGDPK PLIQWKGDR ILDPTKLGP R MHIFQNGSLV IHDVAPEDSG 660
 RYTCIAGNSC NIKHTBAPLY VVDKPVPEES EGPGSPFFYK MIQTIGLSVG AAVAYIIAVL 720
 60 GLMFYCKRC KAKRLQKQE GEPFEMECLN GGPLQNGQPS AEIQBEVALT SLGSGPATIN 780
 KRESTEDKH FFRSLOPIT TLGKSSGFEV FLAKAQGLEB GVAETLVLVK SLQTKDRQQQ 840
 LDFRRELEMF GKLNHANVVR LLGLCREAP HYMVLEYVOL GDLXQFLRIS KSKDEKLKSO 900
 PLSTQKVAL CTQVALGMEH LEMNRFVEKD LAARNCLVSA QRQVKVSAIG LSKDVYNSEY 960
 YHFRQAWPL RMWSPEALE GDFSTKSDVN AFGVLMKEVF THGEMPHGGQ ADDEVLADLO 1020
 65 AGKARLPQPE GCPSKLYRLM QRCNALSPKD RPSFSEIASA LGDSTVDKPF 1070

Seq ID NO: C387 Protein Sequence
 Protein Accession #: NP_002300.1

70 1 11 21 31 41 51
 MKVLAAGVVP LLLVLHWKHG AGSPLPITPV NATCAIRHPC HNNLMNQIRS QLAQLNGSAN 60
 ALFILYTTAQ GEFFPMNLK LCGPNVTDFP PFHANGTEKA KLVELYRIV YLGTBLGNIT 120
 RDQKILWPSA LSLHSKLNAT ADILRGLLSN VLCRLCSKYH VGRVDVTYGP DTSGKDVFPK 180
 75 KKLGCQLLGK YKQIIVLAQ AF 202

Seq ID NO: C388 Protein Sequence
 Protein Accession #: XP_097508

80 1 11 21 31 41 51
 MGRPRLTVC HVSIISARD LEMNMLTELQ PGLFRHLRFL BELRLSCNHL SHIPQQAQSG 60
 LYSKILMLQ NMQLGGIPAE ALWELPSLQS LRLDANLISL VPKSPFGLS SLRHLWLDN 120
 ALTEIPVRAI NNLPAIQAMT LALNRIISHIP DYAFQNLISL VVLHLNRRRI QHLGTHSFE 180
 LHNLETLDLN YAKLQEPFVA IRTLGRQLQL GFBNNNIKAI PEKAFMGNPL LQTIHFYDNP 240

15 Seq ID NO: C389 Protein Sequence
Protein Accession #: NP 570901

Seq ID NO: C390 Protein Sequence
Protein Accession #: NP_061844

45 Seq ID NO: C391 Protein Sequence
Protein Accession #: NP_005622

65 Seq ID NO: C392 Protein Sequence
Protein Accession #: BAC04382

1372

Seq ID NO: C393 Protein Sequence
Protein Accession #: NP_004616

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5      1      11      21      31      41      51
|      |      |      |      |      |
MNRKARRCLG HLFSLGVMVY LRIGGFSSVV ALGASII CNK IPGLAPRQRA ICQSRPDALY 60
VIGEGSQMGL DECQGPFRNG RWNCSALGER TVFGKELKVG SREAAFTYAI IAAGVAHAIT 120
AACTQGNLSD CGCDKKEKQG YHRDEGWKNG GCSADIRYGI GFAKVFFVDAR EIKQARTILM 180
10    NLHNNAGRK ILEENMKLEB KCHGVSGSCT TKTCTWTLPO FRELGVVLKD KYNEAVHVEP 240
VRASRNKRPF FLKIKKPLSY RKPMDTDLVY IEKSPNYCEE DPVTGSGVTQ GRACNKTAPO 300
ASGCDLMDCG RGYNTHQYAR VWQCNCKFHW CCYVKCNTCS ERTEMYTCK 349

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Seq ID NO: C394 Protein Sequence
Protein Accession #: NP_003777

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15      1      11      21      31      41      51
|      |      |      |      |      |
MDALCGSGEL GSKFWSNLS VHTENPDITP CFONSLLAWV PCIYLVVALP CYLLYLRLHHC 60
20    RGYIILSHLS KLMVLGVLL WCVSWADLFY SPHGIVHGRA PAEVFVTPPL VVGVTMLLAT 120
LLLIQYERLQG VQSSGVLIIF WFLCVVCAIV PFRKILLAK ABGEISDPPR PTFYIHFAL 180
VLSALILACF REKPPFFSAK NVDPNPFYET SAGFLSLRFP NWFTKMAIYG YRHPLEEKDL 240
WSLKEEDRSQ MVVQQLLEAW RKQEKQTARE KASAAPGKNA SGDESVLLGA RPRPKPSFL 300
KALLATPGSS FLISACFKLI QDLSEFINPQ LLSILIRFIS NPMAPSWWGF LVAGLMFLCS 360
25    MMQSLILQHY YHIFVTGVK FRTGIMGVYI RKALVITNSV KRASVTGETV NLMVSVDARF 420
MDLAPFLNLL WSAPLQIILA IYFLWQNLGP SVLAGVAFMV LLIPLMGAVA VKMRAPOVKQ 480
MKLKDRIK MSELINGIKV LKGYAWEPSP LKQVEGIRQG ELQLLRATAA LHTTTFTWM 540
CSPLVTLTIT LWVYVVDNPN NVLDAAEKAFV SVSLENIIRL PLNMLPQLIS NLTAQASVLK 600
RIQQFLSQEE LDPQSVERKT ISPGYAITIH SGTFTWAQDL PPTLHSLDIQ VPKGALVAVV 660
30    GFVCGGKSSL VSALLGEMEK LEGKVHMKGS VAYVEQQAWI QNCTLQENVL PGKALNPKRY 720
QDTLEACALL ADLEMLPGGD QTEIGEGGIN LSGGQRQEVN LARAVYSDAD IFLLDDPLSA 780
VDSHVAKHIF DRVIGPEGVL AGKTRVLVTH GISPLPQTDI IIVLADGQVS EMGPYPALLQ 840
RNGSFANFLC NYAPDEKQGH LEDSWTALRG AEDKEALLIE DTLNHTDLT DNDPVTYVVG 900
KQFMRLSAL SSDEGGQGRF VPRRHLPSE KVQVTEAKAD GALTQEEKAA IGTVELSVFW 960
35    DYAKAVGLCT TLAICLLYVG QSAALIGANV NLSANTNDAM ADSRQNTBL RLGVYALGI 1020
LQGFVLMIAA MAMAAGGIIA ARVLEQALLH NKIRSPQSFF DTTSPGRILN CFSKDIYVVD 1080
EVLAPVILML LNSFFNALIST LVVIMASTFL FTVVILPLAV LTYLVQRFYA ATSRQLKRL 1140
SVSRSPIYSH FSETVTGASV IRAYNRSDFF EII SDTKVDA NQSCSYFYII SNRWLSIGVE 1200
40    FVGNQVLEFA ALPAVIGRSS LNPGLVGLSV SYSLQVTFAL NMMIRMSDL ESNIVAVEKV 1260
KEYSKTETEA PWVVGSRPP EGNPPRGEVE FRNYSVRYRP GLDLVLRLDS LEVHGGEKVG 1320
IVGRTGAGKS SMTLCFLRIL EAKRGIRID GLNVADIGLH DLRSQTLIIP QDPIFSGTL 1380
RMNLDFFGSY SERDIWALE LSHLHTFVSS QPAGLDQCDS EGGNLSVGG QQLVCLARAL 1440
45    LRKSRILVLD BATAAIDLET DMLIQTIRT QEDTCTVLT ABRLNTIMDY TRVLVIDRGV 1500
VAEFDSPANL IARGIFYGM ARDAGLA 1527

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Seq ID NO: C395 Protein Sequence
Protein Accession #: NP_004617

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50      1      11      21      31      41      51
|      |      |      |      |      |
MRARPQVCEA LLFALALQTG VCYGIKWLAL SKTPSALALN QTQCKQLEG LVSAQVQLCR 60
SNLELMETVV HAAREVMRAC RRAFADMRWN CSIELAFNY LLDLERGTRE SAPVYALSAA 120
AISHAIAIAR TSEDLPQCSC GPVPGEPGP GNRWGGCADN LSYGLLMGAK FSDAPMKVK 180
55    TGSQANKLMR LHSNEVGRQA LRASLEMKCK CHGVGGSCSI RTCKGLQEL QDVADLKR 240
YLSATKVVER PMGRKHLVP KDLDIRVVD SELVYLQSSP DFCMKNEKVG SEGTQDRQCN 300
KTSNGSDSCD LMCCGRGYMP YTDREVERCH CKYHWCCTVT CRRCERTVER YVCK 354

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Seq ID NO: C396 Protein Sequence
Protein Accession #: NP_114072

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60      1      11      21      31      41      51
|      |      |      |      |      |
MEWGYLLEVT SLLAALALLQ RSSGAAAASA KELACQBITV PLCKSIGYNY TYMPNQFNHD 60
TQDEAGLEVH QFWPLVEIQC SPDLKFFLCB MYTPICLEDY KKPPLPCRSV CERAKAGCAP 120
65    LMRQYGFAMP DMRCDRLPE QGNEDTLQMD YNRTDLTTAA PSPERLPPF PPGQPPSGS 180
GEGRPQARP PRRGGRRGG GGDAAAPPAR GGGGGGKARP PGGGAAPCEP GCQCRAFMVS 240
VSSRRBPLYN RVKTQIANC ALPCHNPPFS QDERAFTVFW IGLNSVLCFV STPATVSTFL 300
IDMERFKYPE RPIIFLSACY LFSVGVYLVV LVAGHEKVCV SGGAPAGGA GGAGGAAAGA 360
GAAGAGAGGP GGRGEYEEGL AVEQEVRYET TGFALCTVVF LLYVFFGMAS SIWVILSLT 420
70    WFLAAGMKWG NEALAGYBQY FHLAANLVES VKSLAVLALS SVDGDPVAGI CYVGRQSLDN 480
LRGFVLAPLV IYLFQITMFL LAGFVSLFRI RSVIXQDGP TKTHKLEKLM IRLGLFTVLY 540
TVPAAVVUAC LFYEQHNRPR WEATHNCPCL RDLQPDQARE PDYAVFMKY FMCLVVGITS 600
GVVWVSGKTL ESWRSLCTRC CWASKGAANG GGAGATAAGG GGGPGGGGGG GPGGGGGPGG 660
75    GGGSLYSQVS TGLTWRSGTA SSVSYPRQMP LSQV 694

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Seq ID NO: C397 Protein Sequence
Protein Accession #: XP_050625

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80      1      11      21      31      41      51
|      |      |      |      |      |
MLQGPGLSLI LFLASHCCIG SARGLFLFQQ PDFSYKRSNC KPIPANLQLC HGIRYQNMRL 60
ENLLGHETMK EVLEQAGAWI PINMKQCHFD TKKFLCLSLFA FVCLDLDDET IQPCHSLCVQ 120
VEDRCAPVMS APGFPWPDML ECDRFPQDND LCIFLASSDH LIPATREAPK VCRACKNND 180
DDNDIMETLC KNDPALKIKV KETIYNRDT KIILETKSKT IYKLVGVSER DLKRSVLNKL 240

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	DSLQCTCEEM NDINAPYLVM GQKQGGELVI TSVKRWQKQKQ REFKRISRSI RKLQC						295
	Seq ID NO: C398 Protein Sequence						
	Protein Accession #: NP_001297.1						
5	1	11	21	31	41	51	
	MSMGLGITGT	ALAVLGWLG	IVCCALPMWR	VSAFIGSNII	TSQNIWBLW	MNCVVQSTGQ	60
10	MQCKVYDSDL	ALPQDLQAA	ALIVVAILLA	APGLLVALVG	AQCTNCVQDD	TAKAKITIVA	120
	GVLFLAALL	TLVPVWSAN	TIIRDFYNPV	VPEAQKREMG	AGLYVGWAAA	ALQLLGGALL	180
	CCSCPPREKK	YTATKVYSA	PRSTGPGASL	GTGYDRKDYV			220
	Seq ID NO: C399 Protein Sequence						
	Protein Accession #: NP_036581.1						
15	1	11	21	31	41	51	
	MESRKDITNQ	EELWKMCPRR	NLEEDDYLRK	DTGETSMLKR	FVLLHLBQTA	HADEFDCPSE	60
20	LQHTQELFPQ	WHPDLKAAI	IASLTFLYTL	LREVLHPLAT	SHQQYFYKIP	ILVINKVLPM	120
	VSITLLALVY	LPGVIAATVQ	LHNGTKYKKF	PHWLDKMWLT	RKQFGLLSFF	FAVLHAIYSL	180
	SYPMERSYKY	KLLNWAYQQV	QQMKEDAWTE	HVVWRMBIYV	SLGIVGLAIL	ALLAVTSIPS	240
	VSDSLTWREF	HYIQSKLGIV	SLLLGTIHAL	IFAMNKNWID	KQFVWYTPPT	FMIAVELPIV	300
	VLIFKSILFL	PCLRKILKI	RHGWDVTKI	NKTETCSQL			339
25	Seq ID NO: C400 Protein Sequence						
	Protein Accession #: NP_001766.1						
30	1	11	21	31	41	51	
	MANCEFSPVS	GDKPCCRLSR	RAQLCLQVSI	LVLILVVVLA	VVVERWRQTV	SGPGTTKRFP	60
	ETVLARCVKY	TEIHEPMRHV	DCQSVWDAPK	GAFISKPCPN	ITEEDYQPLM	KLGTQTVPCN	120
	KILLWSRIKD	LAKQFTQVQR	DMPTLEDTLL	GVLADDLTWC	GEFNTSKINY	QSCPDWRKDC	180
	SNPVSFVFWK	TVSRRFABAA	CDVVHVMLNG	SRSKIFDKNS	TFGSVVEVHL	QPEKVQTLER	240
35	WVHGRERDS	RDLCQDPTIK	ELESIISKRN	IQFSCKNIYR	PDKFLQCVMN	PEDSSCTSEI	300
	Seq ID NO: C401 Protein Sequence						
	Protein Accession #: XP_120513.2						
40	1	11	21	31	41	51	
	MVSECTFSGPL	RSINENVKKF	YALHAFMFRM	SSEAAMLGES	RTPKPRKHRA	TTRAKYFKRF	60
	FSEGESNSNR	LVEELAVIHT	YSDDPAPTTS	PSSVQEREPG	VMQCAPRARF	GSRTPPAAAE	120
	ASSPRLGIGE	AACQSGARAA	APRAGARRCQ	FQRQAAAAAA	TAQTHYLEEA	RTRADPAGER	180
45	RRHPRSPAPG	GRGTCSEGPA	PRRRMEEMQ	PAEEGSPVFK	IYKQSPYEV	LKTFPSEKPA	240
	LAKRYERPTL	VELPHGLHRT	PAQPPASPAA	ASSSSSFAAV	VRLGAPPRFP	RRGFRARGTI	300
	PLLLPAPGVA	CTLLPPTSS	SPPSPRPRPW	HAAAPRGOTS	ETHMWRQST	LPGSDTMVSV	360
	FGLMAQRWRQ	HRSLKQFEWG	ILGSWGTWPC	QODWLEKEGQ	VAVLLPRSEG	NTAPKKSRMI	420
	LDAFAQQCSR	VLSLLNCGSK	LLDSNHSQSM	ISCVXQEGSS	YNERQEECHI	GKGVHSQTS	480
50	NVDIEMQYVQ	AKQTSAPFLR	VFTDSLQNTL	LSGSFTTNP	SSASEYGHIA	DVDPLSTSPV	540
	HTLEWISLDS	TASLCKSRHL	SREFFVKSDP	ENPLQALAG	GASRFPSGAQ	QSIAYRVNSE	600
	LEDGIRSFVP	LSCEALEMDL	TSLSGKQLLN	NYPVYITSKQ	WDEAVNSSKK	DGRELLRLYL	660
	RFVFTTDELK	YSCGLGKRKR	SVQSGRTGPE	RRPLDPVKVT	CLRGTAFFRS	VSPSVISFHR	720
	IGCGSPRTSV	QPSVF					735
55	Seq ID NO: C402 Protein Sequence						
	Protein Accession #: BAA92562.1						
60	1	11	21	31	41	51	
	METTIVLGIN	FEYKGMTGWE	VAGDHIYTAA	GASDNDFMIL	TLVVPGRFP	QSVMAITENK	60
	EVARITVFVE	TLCSVNCELY	FMVGVNERTN	TPVETWKGSK	GKQSYTYIIE	ENITTSFTWA	120
	FQRTTFEAS	RYXTNDVAKI	YSINVTNVMN	GVASYCRPCA	LEASDVGSSC	TSCPAGYYID	180
	RDSGTCHSCP	PNTILKAHPQ	YGVQACVPCG	PGTKNNKIHS	LCYNDCTFSR	NTPRTTFNIN	240
65	FSALANTVTL	AGGSPFTSKG	LKYFHHFTLS	LCGNQGRKMS	VCTDMVTDLR	IPEGESGFESK	300
	SITAYVCQAV	IIPPEVTGYK	AGVSSQPVSL	ADRLIGVTTD	MTLDGITSPA	ELFHLBSLGI	360
	PDVIFPFRSN	DVTQSCSSGR	STTIRVRCSP	OKTVPGSLLL	PGTCSGDTCD	GCNHFPLNES	420
	AAACPLCSVA	DYHAIYSSCV	AGIQKTTIVW	REFKLCSSGI	SLPQRVITIC	KTIIDFWLKVG	480
	ISAGTCTAIL	LTVLTCTYFK	KNQKLEYKYS	KLVMNATLKD	CDLPAADSCA	IMBEGEDVEDD	540
70	LIFTSKKSLF	GKIKSFTSKQ	PAPVTISLSE	DS			572
	Seq ID NO: C403 Protein Sequence						
	Protein Accession #: NP_055139.1						
75	1	11	21	31	41	51	
	MALQGISVVE	LSGLAPGRXC	AMVLADFGAR	VVRVDRPGSR	YDVSRLGRGK	RSVLVDLKQP	60
	REPRAAASVQ	AVGCAAGALP	PRCHGETPAG	PRDSAGKSK	AYLCQAEWIN	PVQESFCRLA	120
	GHDINYLALS	GVLSKIGRSG	ENFYAPLNIV	ADPAGGGLMC	ALGILMALFD	RTRTDKQVVI	180
80	DAMNVEGTAY	LSSEFLNKTQK	SSLWEAPRGQ	NMLDGGAPFY	TTYRTADGEP	MAVGAIEPQF	240
	YELLIKSLGL	KSDLEENQMS	TDDWPEMKKK	FADVFAKTKK	AEWCQIEDGT	DACVTPVLTF	300
	EEVVHDEENK	ERGSEFITSSE	QDVSPRLAPL	LANTPAIPSS	KQDPFIEGHT	BEILBERGFPS	360
	REIYQNLNSD	KITESNKKVKA	SL				382
	Seq ID NO: C404 Protein Sequence						

Seq ID NO: C409 Protein Sequence
Protein Accession #: NP_068710.1

5	1	11	21	31	41	51	
	MQKVTLGLLV	FLAGFPVLDA	NDLEDKNSPF	YDWHSLQVG	GLICAGVLCA	MGIIIVMSEW	60
	RSSGEQAGRG	WGSPPPLTTQL	SPTGARCKCK	FGQKSGHHPG	ETPPLITPGS	AQS	113
	Seq ID NO: C410 Protein Sequence Protein Accession #: NP_005962.1						
10	1	11	21	31	41	51	
	MQKVTLGLLV	FLAGFPVLDA	NDLEDKNSPF	YDWHSLQVG	GLICAGVLCA	MGIIIVMSAK	60
	CKCKFGQKSG	RHPGETPPLI	TPGSAQS				87
	Seq ID NO: C411 Protein Sequence Protein Accession #: NP_004952.1						
20	1	11	21	31	41	51	
	MLSKVLPLVL	GILLILQSRV	EGPQTESKNE	ASSRDVVYGP	QPQPLENQLL	SETKSTETE	60
	TGSRVGLKPE	ASRIILNLS	NYDHKLKPGI	GEKPTVVTV	IAVNSLGLS	ILDMEYTIDI	120
	IFSQTWYDER	LCYNDTFESL	VLNGNVVSQL	WIPDTFFRNS	KRTHHEITM	ENQMVRIYKD	180
	GKVLVITIRMT	IDAGCSLHML	RFPMDSSSCP	LSFSSFSYFE	NEMIKWENF	KLEINEKNSW	240
	KLFQDFDTGV	SNKTEIITTP	VGDFMVMITF	FNVSRRFGIV	AFQNYVPSSV	TMLSWVSFW	300
25	IKTESAPART	SLGITSVLTM	TTLGTFSRKN	FFRVSYITAL	DFYIALCFVP	CFCALLEFAV	360
	LNFLIYNQTK	AHASFKLRHP	RINRAHART	RARSACARQ	HQBAFVCQIV	TTEGSDGEER	420
	P6CSAQPPS	PGSPGPESL	CSKLACCWC	KRFKKYFCMV	PDCSGSTWQQ	GRLCIHVYEL	480
	DNYSRVVFPV	TFFFNVLVYN	LVCILNL				506
	Seq ID NO: C412 Protein Sequence Protein Accession #: NP_068819.1						
35	1	11	21	31	41	51	
	MEYTIIDIFS	QTYWDERLCY	NDTFESLVIN	GNVVSQWLIP	DTFFRNSKRT	HEHEITMPNQ	60
	MVRIYKDGKV	LYTIRMTIDA	GCSLHMLRFP	MDSHSCPLSF	SSFSYPENEM	IYKWNFKLE	120
	INEKNSWKL	QDFTGVSNK	TEIITTFVGD	FMVMTIFFNV	SRRFYVAFQ	NYVPSSVTM	180
	LSWVSFWIKT	ESAPARTSLG	ITSVLMTITL	GTFSRKMFPR	VSYITALDFY	LAICFVFCFC	240
	ALLEFAVLNF	LIYNQTKAHA	SPKLRHPRIN	SRAHARTAR	SRACARQHQ	AFVCQIVTTE	300
40	GSDGEERPSC	SAQPPSPGS	PEGPRSLCSK	LACCENCKRF	KKYFCMVPCD	EGSTWQQARL	360
	CIHVYRLDNY	SRVVPVTF	FFNVLYWLVC	LNL			393
	Seq ID NO: C413 Protein Sequence Protein Accession #: NP_068822.1						
45	1	11	21	31	41	51	
	MEYTIIDIFS	QIWNKRTRH	HEITMPNQMV	RIYKDGKVLV	TIRMTIDAGC	SLHMLRFPMD	60
	SHSCPLSFS	FSYPENEM	KWENFKLEIN	EKNWKLQF	DFTGVSNKTE	IITTFVGD	120
50	VMTIFFNVSR	RFYVAFQNY	VPSSVTMLS	WVSFWIKTES	APARTSLGIT	SVLMTITLGT	180
	FSRKFPFRVS	YITALDFYIA	ICFVFCFAL	LEFAVLNFLI	YNQTKAHASF	KLRHPRINSR	240
	AHARTRARS	ACARQHQA	VQIVTTEGS	DGEERPSCSA	QQPSPGSPS	GPRSLCSKLA	300
	CCENCKRFFK	YFCMVPCDG	STWQQRLCI	HVYRLDNYSR	VVPFTTFF	NVLVLYWLCLN	360
	I						361
	Seq ID NO: C414 Protein Sequence Protein Accession #: NP_068830.1						
60	1	11	21	31	41	51	
	MEYTIIDIFS	QTYWDERLCY	NDTFESLVIN	GNVVSQWLIP	DTFFRNSKRT	HEHEITMPNQ	60
	MVRIYKDGKV	LYTIRMTIDA	GCSLHMLRFP	MDSHSCPLSF	SSFSYPENEM	IYKWNFKLE	120
	INEKNSWKL	QDFTGVSNK	TEIITTFVGD	FMVMTIFFNV	SRRFYVAFQ	NYVPSSVTM	180
	LSWVSFWIKT	ESAPARTSLG	ITSVLMTITL	GTFSRKMFPR	VSYITALDFY	LAICFVFCFC	240
65	ALLEFAVLNF	LIYNQTKAHA	SPKLRHPRIN	SRAHARTAR	SRACARQHQ	AFVCQIVTTE	300
	GSDGEERPSC	SAQPPSPGS	PEGPRSLCSK	LACCENCKRF	KKYFCMVPCD	EGSTWQQARL	360
	CIHVYRLDNY	SRVVPVTF	FFNVLYWLVC	LNL			393
	Seq ID NO: C415 Protein Sequence Protein Accession #: NP_068591.1						
70	1	11	21	31	41	51	
	MPAVSGPGPL	FCILLILLDF	HSPBTGCPPL	RRFHYKLSFK	GPRILALPGAG	IPFWSHHGDA	60
	ILGLEEVRLT	PSMRNRSGAV	WSRASVFFSA	WEVEVQMRVT	GLGRRGAHGM	AVWYTRGRGH	120
75	VGSVLGLAS	WDGIGIFFDS	PAEDTQDSPA	IRVLASDGH	PSEQPGDGAS	QQLGSCWDF	180
	RNRHPFRAR	ITYWQRLRM	SLNSGLTSPD	PGEFCVDVGP	LLLVPGGFFG	VSAATGTLD	240
	DHDVLSPLTF	SLSEPSEFVP	PQFLEMQQI	RLARQLBGLM	ARLGLCTRED	VTPKSDSEAR	300
	GEGERLFDLE	ETLGRHRRIL	QALRGLSKQL	AQAEQWKKQ	LQPPGQARPD	GGWALDASCQ	360
80	IPSTPGRGKH	LSMSLNKDSA	KVGATLHGQW	TLLQALQEMR	DAAVRMAAEA	QVSYLVFGIE	420
	HHFLELDHIL	GLLQBELRGP	AKAAAKAPR	PGQPPRASSC	LQPGIFLYL	LIQTVGFFGY	480
	VHFRQELNKS	LQECSTGSL	PLGPAPHTPR	ALGILRRQEL	PASMPA		526
	Seq ID NO: C416 Protein Sequence Protein Accession #: XP_117036.1						

5	1	11	21	31	41	51	
	MERRTRGALG	SRPPPPPLPA	LRRLCTGLQA	AGMANPGTLN	RHTCQGRAXA	ABGPWGLFRP	60
	HRCPREAGQA	PVGPSPETQG	VAHVCSRARV	SVDEREPGGG	AYAMHVTPRW	KGCHRHSGRT	120
	VRGSVSNKRP	EQAAPETGRG	PAVARGSGDG	NECGWG			156
Seq ID NO: C417 Protein Sequence							
Protein Accession #: KP_167803.2							
10	1	11	21	31	41	51	
	MPGKGQRKTA	TNKPGLPLGA	PGVGIGGHCL	YVLECKCFIK	NKTKTHHHKK	KNFAAKRNEE	60
	KLKKKKQKEK	KNMTKFFHHT	YPLSQQDFLF	AKSYFCGNGP	CFLWQGLF		108
Seq ID NO: C418 Protein Sequence							
Protein Accession #: NP_079056.1							
20	1	11	21	31	41	51	
	MFRIVERYEM	PRHEVYVLLI	RNIFLKISII	GILCYWLNT	VALSGEECWE	TLIGQDIYRL	60
	LLMDFVFSIV	NSFLGEFLRR	IIGMQLITSL	GLQEFDIARN	VLELIYAQTL	VWIGIFFCPL	120
	LPFIQMIMLF	IMPYSKNISL	MMNFQPPSKA	WRASQMMTFP	IFLLFFPSFT	GVLCITLAIIT	180
25	WRLKPSADCG	PFRGLPLFIH	SIYSWIDTSL	TRPGYLWVVW	IYRNIGSVH	PPFILTILIVL	240
	IITYLYNQIT	EGRKIMIRLL	HEQIINEGKD	KMFLIEKLIK	LQDMEKKANP	SSIVLERREV	300
	EQQGFLLHGE	HDGSLDLRSR	RSVQEGNPRA				330
Seq ID NO: C419 Protein Sequence							
Protein Accession #: Eos sequence							
30	1	11	21	31	41	51	
	MLSDDHVNEI	IIQVENVSNG	VQSHPSNQI	FQEKVLLDSS	INMVLISDI	DVIDSQTYSK	60
	RNDQKGNQVL	RFSTSLNEEM	SQTLHSLRCM	GIDTPGSSHE	TVQGQKLIAS	LIPMTGRDRI	120
	KAIRNQPRIM	BEKNLEKIV	DKEKSKQTER	ILQLNCCIQC	LNSISRAYRR	SKMSLSEILN	180
35	SISLWQKTLK	IIIGKFGTSV	LSYFNFLRWL	LKFNIFSFIL	NFSFIIIPQF	TVAKKNTLQF	240
	TGLEFFTGVG	YFRDTVMYVG	FYTNSTIQHG	NSGASYNMQL	AYIFTIGACL	TTCTFFSLFS	300
	MAKYFNNFI	NPHIYSGGIT	KLIFCNDFTV	THEKAVKLKQ	KNLSTEIREN	LSELRQENSK	360
	LTFNQLLRFR	SAYMVAVVVS	TGVAIACCAA	VYLAAYNMLE	FLKTHSNFGA	VLLLPFVVS	420
40	INLAUPCIYS	MFRIVERYEM	PRHEVYVLLI	RNIFLKISII	GILCYWLNT	VALSGEECWE	480
	TLIGQDIYRL	LLMDFVFSIV	NSFLGEFLRR	IIGMQLITSL	GLQEFDIARN	VLELIYAQTL	540
	VWIGIFFCPL	LPFIQMIMLF	IMPYSKNISL	MMNFQPPSKA	WRASQMMTFP	IFLLFFPSFT	600
	GVLCITLAIIT	WRLKPSADCG	PFRGLPLFIH	SIYSWIDTSL	TRPGYLWVVW	IYRNIGSVH	660
45	PPFILTILIVL	IITYLYNQIT	EGRKIMIRLL	HEQIINEGKD	KMFLIEKLIK	LQDMEKKANP	720
	SSIVLERREV	EQQGFLLHGE	HDGSLDLRSR	RSVQEGNPRA			760
Seq ID NO: C420 Protein Sequence							
Protein Accession #: NP_002241.1							
50	1	11	21	31	41	51	
	MGGDLVLGLG	ALRRRKRLLE	QEKSLAGNAL	VLAGTGIGLM	VLAEMLMWFG	GCSWALYLF	60
	VKCTISISTF	LLLLCLIVAFH	AKEVQLFMTD	NGLRDWRVAL	TGRQAAQIVL	ELAVCGLEPA	120
	PVRGPPCQOD	LGAPLITSPQ	WPGFLLQGEA	LISLAMLRL	YLVPRAVLLR	SGVLLNAYS	180
55	SIGALNQVRF	RHWFAVKLYM	NTHFGRLLLG	LTLGLWLTTA	WVLSVAERQA	VNATGHLSDT	240
	LWLIPITPLT	IGYGDVVPFT	MWGIIVCLCT	GVMGVCCIAL	LVAVVARLKE	FNKAKEKHVN	300
	FMDIQYTKKE	MKEGAAAVLQ	EAMMFVKHTR	RKESHAARRH	ORKLLAALNA	FRQVRLKHK	360
	LREQVNSMVD	ISKMHMILYD	LQQNLSSSHR	ALEKQIDTLA	GKLDALTELL	STALGRPQLP	420
60	EPGQSK						427
Seq ID NO: C421 Protein Sequence							
Protein Accession #: NP_079533.1							
65	1	11	21	31	41	51	
	MGGKQREDD	EAYGKPVKYD	PSFRGPIKNR	SCIDVICCVL	FLLFILGYIV	VGIVAWLYGD	60
	PRQVLYPRNS	TGAYCGMOEN	KDEKPYLLYPN	IFSCILSSNI	ISVAENGLQC	PTPQVCVSSC	120
	PEDPWTVGKN	EFSTQVGEVF	YTKNRNFCPL	GVPWNMTVIT	SLQQLCPSP	LLPSAPALGR	180
70	CFPWITITFP	ALPGITNDTT	IQQGIGSLID	SLNARDISVK	IFEDPAQSWY	NILVALGVAL	240
	VLSLLEFILL	RLVAGPLVLV	LILGVLGVLV	YGIYYCWEEY	EVLDRDKGAS	SQLGFTTNLS	300
	AYQSVQETWL	AALIVLAVLE	AILLVLIFL	RQRIATAIAL	LKEASKAVGQ	MMSTMFPYPLV	360
	TFVLLICIA	YWANTALYPL	PTQBATLGIV	LWASNISSEF	CEKVEINTSC	NPTAHLVNSG	420
75	CPGLMCVPOG	YSSKGLQORS	VFNLIQYGV	GLEFTLWVVL	ALGQCVLAGA	PASFYMAFHK	480
	PQDIPTFPLI	SAFIRTILRYH	TGSLAFGALI	LTLVQIARVI	LEYIDHKLKG	VQNFVARCIM	540
	CCFKOCLNCL	EKFIKFLNRN	AYIMIAIYK	NFCVSAKNAP	MLLMRNIVRV	VVLDDKVTDL	600
	LFPGLLVVG	GVGVLSPFF	SGRIPGLGRD	PKSPHLYYV	LPIMTSLGA	YVIASGFFSV	660
80	FMCDVTLEFL	CFLLEDLENN	GSLDRPYTMS	KSLLKILGKK	NEAPPDNKKR	KK	712
Seq ID NO: C422 Protein Sequence							
Protein Accession #: NP_057264.1							
80	1	11	21	31	41	51	
	MGSNSGQAGR	HIYKSLADDG	PFDSVEPPKR	PTSLIMHSM	AMPGREFCYA	VSAAYVTPVL	60

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LSVGLPSSLY SIWNFLSPIL GFLIQFVVGSS ASDHCRSRWG RRRPYILTLG VMMLVGMALY 120
LNGATVVAAL IANPRRLKLV AISVTMIGVV LFDPAADFID GPIKAYLFDV CSHQDKKGL 180
HYHALPTGFG GALGYILGAI DWAHLELGRLL LGTEFQVMFF PSALVLTLCF TVHLCSISEA 240
PLTEVAKGIP PQQTPODPPL SSDGMYEYGS IEKVNGYVN PELAMQAKN KNHAEQTRRA 300
MTLKSLLRAL VMMPHYRYL CISHLIGWTA FLSNMLFFTD FMQIVYRGD PYSAHNSTEF 360
LIYERGVEVG CWGFCINSVF SSLYSYFQKV LVSYIGLKL YPTGVLLFGL GTGFIGLFPN 420
VYSTLVLCSL FGVMSSTLYT VPFNLITEYH REBEKEROQA PGSDPNSVR GKGMDCATLT 480
CMVQLAGILV GGGGLPLVNT AGTVVVVVIT ASAVALIGCC FVALFVRYVD 530
  
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Seq ID NO: C423 Protein Sequence
 Protein Accession #: NP_003264.1

15
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1 11 21 31 41 51
MEGFGGVGGR GTRGFAAKGV WRGRAEAGPV LGAAERGFMV STGSRRRVFE GPGGGGLRWT 60
PGKGTGRQKG AWGPRADGV RRRTLCMPRG SRDVRAPCG PAGSWGARGG RREDGFSRRR 120
RGSATAAARH HVFPAPGGPF GPRAPAGSTR VPARAGGAVE PTGAAAVARL ARPAGGALPT 180
AGAQQAGPAR GRSGEGSEWA RRGKGRPGFY QSLPGPAVAE GQELKDKSRL RYPINGFQAL 240
VLTALLVGLG MSAGLPLGAL PEMLLPLAFV ATLTAFIVSL FLYMKAQVAP VSALAFGGNS 300
GNPIYDFELG REINPRICFF DFKYFCELRP GLIGWVLINL ALLMKEAEIR GSFSLAMMLV 360
NGFQLLYLGD ALMHHEAVLT TMDITHDQFG FMLAFQDMAN VPPTYSLQAQ PLLRHPQPLG 420
LPMASVICLI NATGYIYFRG ANSQNTFRK NPSPDRVAGL ETISTATGRK LLVSGWWGMV 480
RHPNYLGDLI MALAWSLPCG VSHLLPYFYL LYPTALLVHR BARDERSACR STAWPGRSTA 540
GVCTASCPST STEAAPPPQV GHVPTPPPAH PPGASTELG LKGLHPTCP 589
  
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Seq ID NO: C424 Protein Sequence
 Protein Accession #: NP_056535.1

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 35
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1 11 21 31 41 51
MGRLLRAARL PPLLSPLLLL LVGGAPLGAC VAGSDEPGFE GLTSTSLIDL LLEPTGLEPLD 60
SEEPSETMGL GAGLGAPGSG FPSSENEESR ILQPPQYFWE EEEELNDSSL DLGPTADYVF 120
PDLTEKAGSI EDTSQAGRLP NLPSPLPKMN LVEPPWHMPP REEEEEERE EREKKEVEK 180
QEEEEELL FVNGSGEAK PQVEDFSLTS SSQTPGATKS RHEDSGDQAS SGVEVSSMG 240
PSLLLPSTVP TTTPTGQDQS TSQEAETVL PAAGLGVEFE APQASEEAT AGAAGLSGQH 300
KEVPALPSEF QITAPSGAEH PDEDPLGSR T SASSPLAPGD MELTPSSATL QGEDLNQQLL 360
EQQAEEAQR IPWDSTQVIC KDNENLAGRN YIILNMTENI DCEVFRQERG PQLLALVEEV 420
LPRHSGSGHG AWHISLSKPS EKEQHLLMTL VGEQGVVPTQ DVLSEMLGDIR RLLEEIGIQN 480
YSTTSQQAR ASQVRSDYGT LFWVLVYIGA ICIIIIALGL LYNCWQRRLP KLKEVSRGEE 540
LRFVENGCHD NPTLDVASDS QSEMQEKPS LNGGALNGP GSWGALMGSK RDPEDSDVFE 600
EDTHL 605
  
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Seq ID NO: C425 Protein Sequence
 Protein Accession #: NP_001188.1

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1 11 21 31 41 51
MSEVRPLSRD ILMETLLYEQ LLEPPTMEVL GMTDSEEDLD FMEDEDSLEC MEGSDALALR 60
LACIGDEMIV SLRAPRLAQL SEVAMHSLGL APIYDQTEI RDVLRSMWG FTTLKEMIMR 120
FNRSPMPGSH VSCQVLLAL LLLALLLPL LGGGLHLLK 160
  
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Seq ID NO: C426 Protein Sequence
 Protein Accession #: AAF76225.1

55
 60

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1 11 21 31 41 51
MATPLPPPSF XHLRLRLRL L SGLVLGAALR GAAAGHPDVA ACPGSLDCL KRRARCPPGA 60
HACGCPLOFF QEDQGLCVF RMREPPGGGR PQRLDEID FLAQELARKE SGQSTPLPK 120
DRQLPEPAT LGFSARGQL ELGLPSTPGT FTTPTHTSLG STVSSDPVEM SFLEPRGGQG 180
DGLALVLLA FCVAGAAALS VASLCWCRLQ REIRLTQKAD YATAKAGSP AAFRISPGDQ 240
RLAQSAEMVH YQHQQQMLC LERKEPPEKE LDTASSDEEN EDGDTVYEC PGLAPTGEH 300
VRMPLFDHAA LSAPLEAPSS PPALP 325
  
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65
 70

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Seq ID NO: C427 Protein Sequence
Protein Accession #: NP_004436.1
1 11 21 31 41 51
MVCBLVLLL VSSVLALREV LLDITGETSE IGWLTYPGG WDEVSVLDDQ RRLTRTFEAC 60
HVAGAPPTG QDNWLQTHEV ERRGAQRAHI RLHFSVRACS SLGVSGGTCR EFTLYYRQA 120
KEPDSPPDSV SWHLKRWTKV DTIAADESFF SSSSSSSSS SAANAVGPHG AGQAGLQIN 180
VKERSFGPLT QRGFYVAPQ TGACIALVAV RLFSYTCPAV LRSFASFFET QASGAGGASL 240
VAAVGTCAH AKPEEDGVGG QAGGSPPRLH CNBEGKMWVA VGGCRQPGY QPARGDKACQ 300
ACPRGLYKSS AGNAPCSPCF ARSHAENEA PVPCLSGFY RASSDPFEAP CTGPFSAFQE 360
LMFEVQGSAL MLHWRLPREL GGRGDLFNV VCKECEGRQE PASGGGGTGE RCRDEVHDF 420
RQGLTESRV LVGGLRAEVP YILEQAVNG VSELSPDPQ AAALNVETSH EYPSAVPVVH 480
QVSRASNSIT VSWPQDQIN GNILDYQLRY XDQAEDESH FTLTSETNTA TVTQLSPGHI 540
YGFQVART AAGHPYGGKV YFQTLRQGL SSQPLPERLSL VTGSLGALA FLLAAITVL 600
AVVFQKRRG TGYTEQLQY SSPGLGVKXY IDPSTYEDPC QAIRELAREV DPAYIKIEV 660
IGTSGPGEV QGRLOPRGR EDTVAIQALM AGGASLQMT FLGRAAVLQ FQHPNIRLE 720
GVVTKSRPLM LDTFELGEP LDFELQREG QFSSLLQVAM QRGVAAAMQY LSSFAVHRS 780
LSAESVLVNS HLVCVKARLG HSPQGFSCLL RWAAPVIAH GKHTTSDVW SFGILMWEVM 840
SYGERPYWDM SQGEVLNATE QBFRLEPPFP CPPGLHLLML DTWQKDRARR PHFDQLVAAP 900
DKMIRKPTTL QAGGDPGERP SQALLTFVAL DFPCLDSFQA WLSAIGLEY QDNFSKFGLC 960
  
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TFSDVAQLSL EDLPALGITL AGHQKLLHH IQLLQHLRQ QGSVEV 1006

Seq ID NO: C428 Protein Sequence
Protein Accession #: XP_043340.2

1	11	21	31	41	51	
MPFDERRPDI	YRKVPKDLTQ	PTTGTGAIISI	CCCLFILFLF	LSELTGPIIT	EVVNELYVDD	60
PKKSGGKID	VSLNLSLPLN	HCELVLGLDIQ	DEMGRHEVGH	IDNSMKIPLN	NGAGCRFFEQ	120
FSINKVPGNF	HVSTHSATAQ	PQNPDMTHVI	HKLSFGDTLQ	VQNIHGAFNA	LGGADRLTSN	180
PLASHDYILK	IVFTVYEDKS	GKQYYSQYT	VANKEYVAYS	HTGRIIPAIN	FRYDLSPITV	240
KYTERRQPLY	RFITTICAI	GGTFTVAGIL	DSCIFTASEA	WKRIQLGKMH		290

Seq ID NO: C429 Protein Sequence
Protein Accession #: NP_002142.1

1	11	21	31	41	51	
MAQKEGGRTV	PCCSRPKVAA	LTAGTLLLLT	AIGAASNAIV	AVLLRSQDEP	LYFVQVSSAD	60
ARLMVFDKTE	GTNRLLCSSR	SNARVAGLSC	EEMGFILRAIT	HSELDVRTAG	ANGTSGFFCV	120
DEGRLPHTOR	LLEVISVDCD	PRGRFLAIC	QDCGRRLFPV	DRIVGGRDTS	LGRWPMQVSL	180
RYDGAHLCCG	SLLSGDWVLT	AAHCPPERNR	VLSRWVFPAG	AVAQASPHGL	QLGVQAVVYH	240
GGYLPFRDPN	SEENSNDIAL	VELSSPLFLT	EYIQPVCLPA	AGQALVDGKI	CTVTGNGWTQ	300
YGGQAGVLQ	EARVPIISND	VCNGADFYCN	QIKPKMFCAG	YFEGGIDACQ	GDSSGPFVCE	360
DSISRTPRWR	LCISVSWGTG	CALAQRKPGVY	TKVSDFREWI	FQAIKTHSEA	SGMVTQL	417

Seq ID NO: C430 Protein Sequence
Protein Accession #: BAA92562.1

1	11	21	31	41	51	
NETTVLGGIN	FEYKGMTGWE	VAGDHIYTAA	GASDNDFMIL	TLVVPGFRPP	QSVMDATENK	60
EVARITVFEE	TLCVNCCLY	FMVGVSRTIN	TPVETWKGSK	GKQSYTYILE	ENTTTSFTWA	120
FQRTTFHEAS	RKYINDVAKI	YSINVTNVMN	GVASYCRPCA	LEASDVGSSC	TSCPAGYYID	180
RDSGTCHSCP	PNTILCAHQF	YGVQACVPCG	PGTNNKIKHS	LCYNDCTFSR	NTEPTFTFNK	240
FSALANTVTL	AGGSPSTSKG	LKYPERFTLS	LCGNQGRKMS	VCIDNVITDLR	IPEGSGGFSK	300
SITAYVQOAV	IIPFEVTGYK	AGVSSQFVSL	ADRLIGVITD	MTLDGITSFA	ELPHLESGLI	360
EDVIFPYKSN	DVTQSCSSGR	STTIRVRCSP	QRTVPGSLLL	PGTCSGDTCD	GCNFHFLWES	420
AAACPLCSVA	DYHAIYSSCV	AGIQKTTYVN	REPKLCSGGI	SLPEQRVTIC	KTIDFNLKVG	480
ISAGTCTAIL	LTVLTCTYFWK	KNQKLEYKYS	KLVMMATLKD	CDLPAADSCA	IMEGEVEDD	540
LIFTSKKSLF	GKIKSFTSKQ	PAPVTISLSE	DS			572

Seq ID NO: C431 Protein Sequence
Protein Accession #: NP_004855.1

1	11	21	31	41	51	
MPGOELRTVN	QSOMLLVLLV	LSWLPHGGAL	SLAASRASAF	PGPSELHSD	SREPRRLRKY	60
EDLLVRLRAN	QSWEDSNTDL	VPAFAVRILT	FEVRLGSGGH	LHLRISRAAL	PEGLPEASRL	120
HRALFRLSPT	ASSRWVTRP	LERQLSLARF	QAPALHLRLS	PPPSQSDOLL	AESSSARFQL	180
ELHLFPQAR	GRKRARANG	DDCPLGFGRC	CRILTVRASL	EDLGNADWVL	SPREVQVTMC	240
IGACPSQFRA	ANMBAQIKTS	LHRLKPDYSE	APCCVPA SYN	PMVLIQRTDT	GVSLQTYDDL	300
LAKDCHCI						308

Seq ID NO: C433 Protein Sequence
Protein Accession #: NP_443090.1

1	11	21	31	41	51	
MEDPSGAREP	RARPRERDPG	RRPHPDQGR	HDRPRDRPGO	PRRKRSSDGN	RRRDGDWDPK	60
RDQERDGNRD	RNRDRERERE	RERDPDRGFR	RDTHRDAGFR	AGEHGVWEKP	RQSKTRDGAR	120
GLTMDAAAPF	GPAPWEAREP	PQPQRKGDPG	RRRPESRPFS	ERYLPSTFRP	GREVEYYQS	180
EABGLLECHK	CKYLCTGRAC	CQMLEVLLNL	LILACSSVSY	SSTGGYTGIT	SLGGITYYQF	240
GGAYSGFDGA	DGEKAQQLDV	QFYQLKLPV	TVAMACSGAL	TALCCLFVAM	GVLRVFWCEP	300
LLLVTEGLLD	MLIAGGYIPA	LYFYFHYLSA	AYGSPVCKER	QALYQSEKYS	GFGCSFEGAD	360
IGAGIFAALG	LVVFAAGAVL	AIKGYRVRK	LKERPAEMFE	F		401

Seq ID NO: C435 Protein Sequence
Protein Accession #: Bos sequence

1	11	21	31	41	51	
MGAAGRODFL	FKAMLTISWL	TLTCFPGATS	TVAAGCPDQS	PELQPMNPGH	DQDHHVHIGQ	60
GXTLLLTSSA	TVYSIHSISG	GKLVINDRDE	FIVLRTRHIL	IDNGGELHAG	SALCPFGQNF	120
TIILYGRADZ	GIQDPDYYGL	KYIGVGKGGG	LELHGQKKLS	WTFNLKTLHF	GGMAEGGYFF	180
ERSWGHGRVY	VHVIDPKSGT	VIHSORFDTY	RSKKESERLV	QYLNAVDPGR	ILSVAVNDEG	240
SRNLDDMARK	AMTKLGSRHF	LELGFRRHFW	FLTVKGNPSS	SVEDEHIEYHG	HRGSAARVP	300
KLFQTEHGSE	FNVLSSSEWV	QDVEWTEWFD	ROKVSQIKGG	EKISDLNKAH	PGKICNRPID	360
IQATTMDGVN	LSTEVVYKKG	QDYRFACYDR	GRACRSYVR	FLCGKPFVRPK	LTVTIDTFVN	420
STILNLEDNV	QSWKPGDTLV	IASTDYSMYQ	AESEFQVLP	SCAPNQVQVA	GKPMYLIHGE	480
EIDGVMRAE	VGLLSRNLIIV	MGEKEDKCY	YRNHCNFFD	FDTFGGHILK	ALGFKAHLE	540
GTLEKHMGOQ	LVGYPIHFEH	LAGDVDERGG	YDEPTYIRDL	SIHRTFRCV	TVHGSNGLLI	600
KDVVGYNLSG	ECFPTEDGPE	SRNTFDHCLG	LLVKSCTLLP	SORDSKMKCM	ITDSTYGYI	660
PKPRQDCNAV	STFWMANPNN	NLINCAAAGS	EEGTGFNFIH	HVPTGPSVGM	YSPGYSEHIF	720

LGKPYNNRAH	SNYRAGMIID	NGVKTTEASA	KDKRPFLSII	SARYSPHQDA	DFLKPREPAI	780
IRHFIAYKNQ	DHGAWLRGGD	VWLDSCFRG	EAQEGFLTG	MKAGGILLGG	DEAASGMAQG	840
FSPPCRCLLK	LVTGSPFAH	VSLAHS				866

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It is understood that the examples described above in no way serve to limit the true scope of this invention, but rather are presented for illustrative purposes. All publications, sequences of accession numbers, and patent applications cited in this specification are herein
5 incorporated by reference as if each individual publication, accession number, or patent application were specifically and individually indicated to be incorporated by reference.

WHAT IS CLAIMED IS:

- 1 1. A method for determining the presence or absence of a pathological cell in a
2 patient, said method comprising detecting a nucleic acid comprising a sequence at least 80%
3 identical to a sequence as described in Tables 2A-80 in a biological sample from said patient,
4 thereby determining the presence or absence of said pathological cell.
- 1 2. The method of Claim 1, wherein:
2 a) said pathology is described in Table 1, including a cancer; and/or
3 b) said biological sample comprises isolated nucleic acids.
- 1 3. The method of Claim 1, wherein said biological sample is tissue from an organ
2 which is affected by said pathology of Table 1, including a cancer.
- 1 4. The method of Claim 2, wherein said nucleic acids are mRNA
- 1 5. The method of Claim 2:
2 a) further comprising a step of amplifying nucleic acids before said step of detecting
3 said nucleic acid; or
4 b) where said detecting is of a protein encoded by said nucleic acid.
- 1 6. The method of Claim 1, wherein said nucleic acid comprises a sequence as
2 described in Tables 2A-80.
- 1 7. The method of Claim 2, wherein:
2 a) said detecting step is carried out by:
3 i) using a labeled nucleic acid probe;
4 ii) utilizing a biochip comprising a sequence at least 80% identical to a sequence
5 as described in Tables 2A-80; or
6 iii) detecting a polypeptide encoded by said nucleic acid; or
7 b) said patient is:
8 i) undergoing a therapeutic regimen to treat said pathology of Table 1; or
9 ii) is suspected of having said pathology or cancer.
- 1 8. An isolated nucleic acid molecule comprising a sequence as described in
2 Tables 2A-80.

- 1 9. The nucleic acid molecule of Claim 8, which is labeled.
- 1 10. An expression vector comprising the nucleic acid of Claim 8.
- 1 11. A host cell comprising the expression vector of Claim 10.
- 1 12. An isolated polypeptide which is encoded by a nucleic acid molecule
2 comprising a sequence as described in Tables 2A-80.
- 1 13. An antibody that specifically binds a polypeptide of Claim 12.
- 1 14. The antibody of Claim 13:
2 a) conjugated to an effector component;
3 b) conjugated to a detectable label, including a fluorescent label, a radioisotope, or a
4 cytotoxic chemical;
5 c) which is an antibody fragment; or
6 d) which is a humanized antibody.
- 1 15. A method for specifically targeting a compound to a pathological cell in a
2 patient, said method comprising administering to said patient an antibody of Claim 13,
3 thereby providing said targetting.
- 1 16. A method for determining the presence or absence of a pathological cell in a
2 patient, said method comprising contacting a biological sample with an antibody of Claim 13.
- 1 17. The method of Claim 16, wherein:
2 a) said antibody is conjugated to:
3 i) an effector component; or
4 ii) a fluorescent label; or
5 b) said biological sample is a blood, serum, urine, or stool sample.
- 1 18. A method for identifying a compound that modulates a pathology-associated
2 polypeptide, said method comprising the steps of:

- 3 a) contacting said compound with a pathology-associated polypeptide, said
4 polypeptide encoded by a polynucleotide that selectively hybridizes to a sequence
5 at least 80% identical to a sequence as described in Tables 2A-80; and
6 b) determining the functional effect of said compound upon said polypeptide.

1 19. A drug screening assay comprising the steps of:

- 2 a) administering a test compound to a mammal having a pathology of Table 1 or a
3 cell isolated therefrom; and
4 b) comparing the level of gene expression of a polynucleotide that selectively
5 hybridizes to a sequence at least 80% identical to a sequence as described in
6 Tables 2A-80 in a treated cell or mammal with the level of gene expression of said
7 polynucleotide in a control cell or mammal, wherein a test compound that
8 modulates said level of expression of the polynucleotide is a candidate for the
9 treatment of said pathology.
10

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
22 May 2003 (22.05.2003)

PCT

(10) International Publication Number
WO 2003/042661 A3

(51) International Patent Classification⁷: **C12Q 1/68**,
C07H 21/02, 21/04

(21) International Application Number:
PCT/US2002/036810

(22) International Filing Date:
13 November 2002 (13.11.2002)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:

60/350,666	13 November 2001 (13.11.2001)	US
60/332,464	21 November 2001 (21.11.2001)	US
60/334,393	29 November 2001 (29.11.2001)	US
60/335,394	3 December 2001 (03.12.2001)	US
60/340,376	14 December 2001 (14.12.2001)	US
60/347,211	8 January 2002 (08.01.2002)	US
60/347,349	10 January 2002 (10.01.2002)	US
60/355,250	8 February 2002 (08.02.2002)	US
60/356,714	13 February 2002 (13.02.2002)	US
60/359,077	20 February 2002 (20.02.2002)	US
60/368,809	29 March 2002 (29.03.2002)	US
60/370,110	4 April 2002 (04.04.2002)	US
60/372,246	12 April 2002 (12.04.2002)	US
60/386,614	5 June 2002 (05.06.2002)	US
60/396,839	16 July 2002 (16.07.2002)	US
60/397,775	22 July 2002 (22.07.2002)	US
60/397,845	22 July 2002 (22.07.2002)	US
60/409,450	9 September 2002 (09.09.2002)	US

(71) Applicant (for all designated States except US): **PRO-TEIN DESIGN LABS, INC.** [US/US]; 34801 Campus Drive, Fremont, CA 94555 (US).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **AFAR, Daniel** [CA/US]; 435 Visitacion Avenue, Brisbane, CA 94005 (US). **AZIZ, Natasha** [US/US]; 411 California Avenue, Palo Alto, CA 94306 (US). **GINSBURG, Wendy, M.** [US/US]; 655 Page Street, San Francisco, CA 94117 (US). **GISH, Kurt, C.** [US/US]; 37 Artuna Avenue, Piedmont, CA 94611 (US). **GLYNNE, Richard** [GB/US]; 2691 Palomino Circle, La Jolla, CA 92037 (US). **HEVEZI, Peter, A.** [GB/US]; 1360 11th Avenue, San Francisco, CA 94122 (US). **MACK, David, H.** [US/US]; 2076 Monterey Avenue, Menlo Park, CA 94025 (US). **MURRAY,**

Richard [US/US]; 22643 Woodridge Court, Cupertino, CA 95014 (US). **WATSON, Susan, R.** [GB/US]; 805 Balra Drive, El Cerrito, CA 94530 (US). **WILSON, Keith, E.** [US/US]; 219 Jeter Street, Redwood City, CA 94062 (US). **ZLOTNIK, Albert** [US/US]; 507 Alger Drive, Palo Alto, CA 94306 (US).

(74) Agent: **KUNG, Viola, T.**; Howrey Simon Arnold White, LLP, Box 34, 301 Ravenswood Avenue, Menlo Park, CA 94025 (US).

(81) Designated States (*national*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (*regional*): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Declaration under Rule 4.17:

— *of inventorship (Rule 4.17(iv)) for US only*

Published:

— *with international search report*
— *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments*

(88) Date of publication of the international search report:
28 October 2004

(15) Information about Correction:

Previous Correction:

see PCT Gazette No. 42/2003 of 16 October 2003, Section II

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: METHODS OF DIAGNOSIS OF CANCER, COMPOSITIONS AND METHODS OF SCREENING FOR MODULATORS OF CANCER

(57) Abstract: Described herein are genes whose expression are up-regulated or down-regulated in specific cancers or other diseases, or are otherwise regulated in disease. Related methods and compositions that can be used for diagnosis, prognosis, and treatment of those medical conditions are disclosed. Also described herein are methods that can be used to identify modulators of these selected conditions.



WO 2003/042661 A3

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US02/36810

A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : C12Q 1/68; C07H 21/02, 21/04

US CL : 435/6; 536/23.1, 24.3

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 435/6; 536/23.1, 24.3

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
WEST, PubMed**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	SATO, H. et al., Cloning and Expression of a Plasma Membrane Cystine/Glutamate Exchange Transporter Composed of Two Distinct Proteins, J. Biol. Chem. 23 April 1999, Vol. 247, No. 17, pp. 11455-11458.	1-7
A	KIM, J. Y. et al., Human cystine/glutamate transporter: cDNA cloning and upregulation by oxidative stress in glioma cells, B.B. Acta. June 2001, Vol. 1512, pp. 335-344.	1-7

☐ Further documents are listed in the continuation of Box C.☐ See patent family annex.

* Special categories of cited documents:

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier application or patent published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T"

later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X"

document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y"

document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&"

document member of the same patent family

Date of the actual completion of the international search

04 August 2004(04.08.2004)

Date of mailing of the international search report

13 SEP 2004

Name and mailing address of the ISA/US

Mail Stop PCT, Attn: ISA/US

Commissioner for Patents

P.O. Box 1450

Alexandria, Virginia 22313-1450

Facsimile No. (703) 872-9306

Authorized officer

Teresa Strzelecka

Telephone No. (571) 272-1600

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US02/36810

Box I Observations where certain claims were found unsearchable (Continuation of Item 1 of first sheet)

This international report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claim Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:
2. ☐ Claim Nos.:
because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:
3. ☐ Claim Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box II Observations where unity of invention is lacking (Continuation of Item 2 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:
Please See Continuation Sheet

1. ☐ As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☒ No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.: 1-7, SEQ ID NO: 19

Remark on Protest

☐
☐

The additional search fees were accompanied by the applicant's protest.

No protest accompanied the payment of additional search fees.

BOX II. OBSERVATIONS WHERE UNITY OF INVENTION IS LACKING

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1. In order for all inventions to be examined, the appropriate additional examination fees must be paid.

Group I, claim(s) 1-7, drawn to a special technical feature of a method for determining presence or absence of a pathological cell in a patient, said method comprising detecting a nucleic acid comprising a sequence at least 80% identical to a sequence as described in Tables 2A-80 in a biological sample from said patient, thereby determining the presence or absence of said pathological cell.

Group II, claim(s) 8-11, drawn to a special technical feature of an isolated nucleic acid molecule comprising a sequence as described in Tables 2A-80, expression vector comprising the nucleic acid and a host cell comprising the expression vector.

Group III, claim(s) 12, drawn to a special technical feature of an isolated polypeptide which is encoded by an isolated nucleic acid molecule comprising a sequence as described in Tables 2A-80.

Group IV, claim(s) 13, 14, drawn to a special technical feature of an antibody which specifically binds to polypeptide of claim 12.

Group V, claim(s) 15, drawn to a special technical feature of a method for specifically targeting a compound to a pathological cell in a patient, comprising administering to a patient an antibody of claim 13.

Group VI, claim(s) 16, 17, drawn to a special technical feature of a method for determining the presence or absence of a pathological cell in a patient, comprising contacting a biological sample with an antibody of claim 13.

Group VII, claim(s) 18, drawn to a special technical feature of a method for identifying a compound that modulates a pathology-associated polypeptide by contacting the compound with a pathology-associated polypeptide encoded by a polynucleotide which selectively hybridizes to a sequence at least 80% identical to a sequence described in Tables 2A-80 and determining the functional effect of the compound on the polypeptide.

Group VIII, claim(s) 19, drawn to a special technical feature of a drug screening assay comprising the steps of: administering a test compound to a mammal having pathology of Table 1 or a cell isolated therefrom; comparing the level of gene expression of a polynucleotide which selectively hybridizes to a sequence at least 80% identical to a sequence described in Tables 2A-80 in a treated cell or mammal with the level of gene expression of the polynucleotide in a control cell or mammal.

The inventions listed as Groups I-VIII do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons: claim 8 is anticipated by a sequence with accession No. BE440042 (Table 2A, first entry) (July 25, 2000), therefore there is no contribution of claim 8 over prior art.